

"THE ORIGIN OF THE SEMITIC ALPHABET"

A Dissertation Submitted By

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To Edinburgh University

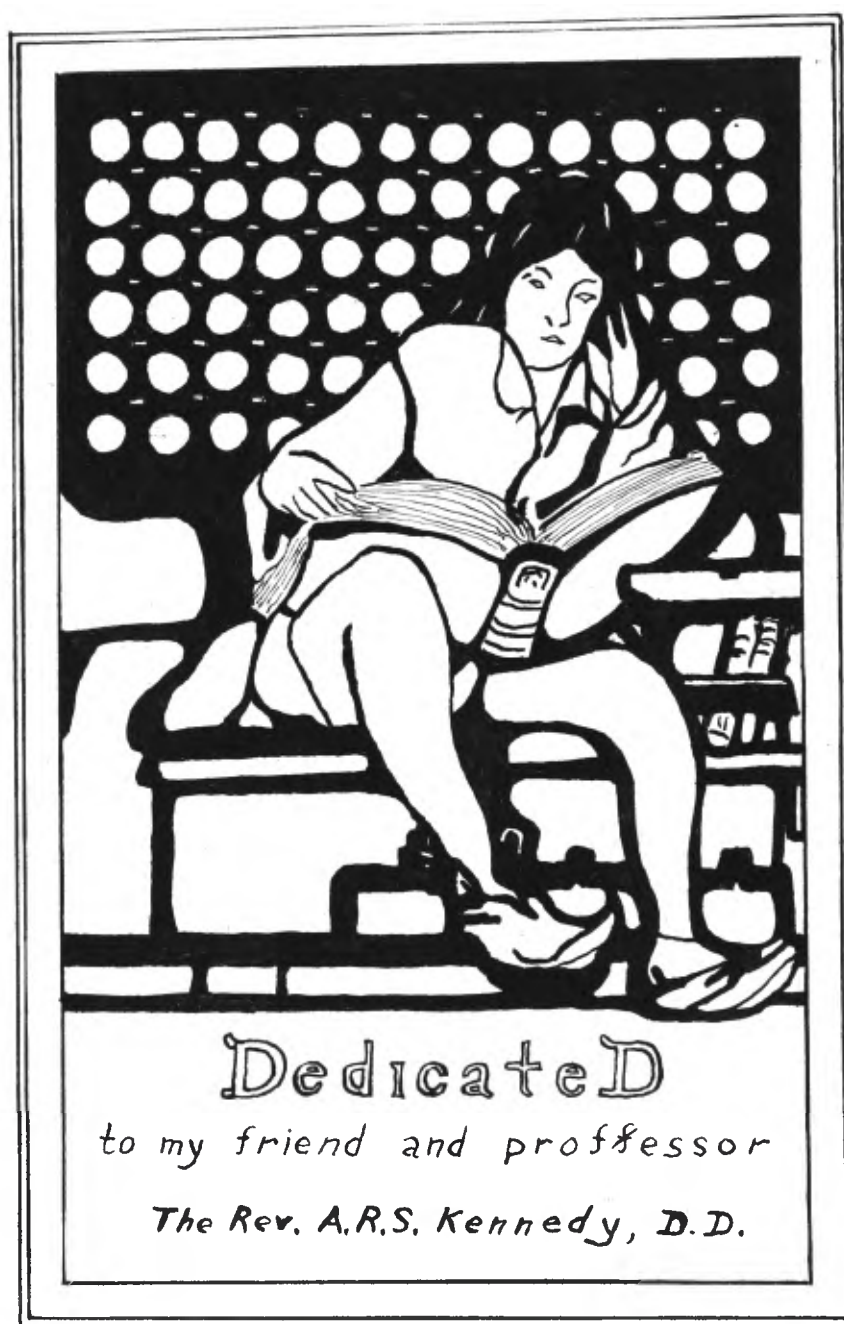
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THE PREFACE.

It is a popular desire among us all to push back into the realm of the unknown. This is undoubtedly the reason why I undertook this particular study. I had not been at it long, however, before I found myself floundering about in an immense sea of technical literature, most of it written in a foreign tongue. I discovered that I had a man-sized task.

The subject, however, is hardly ripe for discussion. A complete demonstration of how the alphabet came to be is beyond the boundaries of our present knowledge, and to even attempt such a demonstration ~~is~~ is almost the equivalent of making a fool of one's self. There have been fools on this subject. I hope the present writer is not one of them!

With the understanding, therefore, that what follows is an honest attempt to cover the field and evaluate results, with no particular effort at brilliance, I submit the following dissertation with a legitimate consciousness of work reasonably well done.

Chicago, U.S.A.

C. E. G.

BIBLIOGRAPHY

- Aimé-Giron, Noël "Note sur les inscriptions de Ahiiram,"
in Bulletin de l'Institut français d'archéologie
orientale, XXVI, 1925 pp. 1-13.
- Albright, W. F. "Notes on Early Hebrew and Aramaic Epi-
graphy" in The Journal of the Palestine Oriental
Society (JPOS) VI. 1926, pp. 75-102. (See
especially pp. 75-84.)
- Ball, C. J. "The Origin of the Phoenician Alphabet" in
Proceedings of the Society of Biblical Archaeol-
ogy (PSBA) XV. London, 1893, pp. 392-408.
- Light from the East or the Witness of the Monu-
ments. (An Introduction to the study of Biblical
Archaeology.) pp. 256. London, 1899. (See
especially pp. 232-238.)
- "A Phoenician Inscription of B.C. 1500." in
Proceedings of the Society of Biblical Archaeol-
ogy (PSBA) 30. London, 1908, pp. 243-244.
- Bartels, Wanda V. "Die Reihenfolge der Buchstaben im Alpha-
bet," in Zeitschrift der Deutschen Morgenländischen
Gesellschaft (ZDMG) Leipzig, 1915. Vol. 69, pp.
52-58.
- Barton, George A. Archeology and the Bible, Phila., 1916
(now 1925 ed.) 461 pp. 114 plates.
- Bauer, Hans "Wie ist die Reihenfolge der Buchstaben im Alpha-
bet zustande gekommen?" in Zeitschrift der
Deutschen Morgenländischen Gesellschaft (ZDMG) 67,
Leipzig, 1913. pp. 501-502.
- Zur Entzifferung der neuentdeckten Sinaischrift,
1918.
- Orientalistische Literaturzeitung, March 1925,
Col. 129-140. (OLZ)
- Berger, Philippe Histoire de l'Écriture das l'Antiquité.
2 ed. Paris, 1892, 389 pp.
- Bevan, A. A. "Writing" in Encyclopedia Biblica (E. Bi.) IV.
- Bissing, F. W. von "Die Datierung der Petrie'schen Sinaiin-
schriften" in Sitzungsberichte der Bayer. Akademie
der Wissenschaften, Febr. 7, 1920.

- Bliss, F. J. "Report on the Excavations at Tell es-Sâfi." in Palestine Exploration Fund Quarterly Statement (Q.S.) 1899, pp. 317-333. (See especially p. 326).
- Breasted, James Henry Ancient Records of Egypt, 5 vols. (See especially Vol.IV, Par. 582.)
- "The Physical Processes of Writing in the Early Orient and their Relation to the Origin of the Alphabet," in The American Journal of Semitic Languages and Literature (AJSL) 32. Chicago, 1915-16, pp. 230-249.
- Brown, F., Driver, S.R. and Briggs, C.A. Hebrew and English Lexicon of the Old Testament. 1907.
- Brugsch, Heinrich A History of Egypt under the Pharaohs. (Translated by H. D. Seymour) London, 1879. Vol. I. pp. 92, 93.
- "Bildung und Entwicklung der Schrift" in Sammlung gemeinverständlicher Wissenschaftlicher Vorträge. Berlin, III. 1868, pp. 3-29.
- Bruston, Charles Revue de Théologie de Montauban, XX 1911, p. 177f.
- Burney, C. F. The Book of Judges, London, 1918. 528 pp. (See especially pp. 253-263.)
- "Calendar" inscription of Gezer. See Quarterly Statement, 1909, pp. 26-29 by Lidzbarski; pp. 30-33 by Gray; and pp. 33-34 by Pilcher.
- Champollion, Jean F. Lettre à M. Dacier relative à l'alphabet des hiéroglyphes phonétiques employés par les Égyptiens, et cetera. Paris, 1828.
- Chwolson, D. Corpus Inscriptionum Hebraicarum enthaltend Grabschriften aus der Krim und andere Grab- und inschriften in Alter Hebräischer Quadratschrift, sowie auch Schriftproben aus handschriften vom IX-XV Jahrhundert. St. Petersburg, 1882. 527 pp. (See table of alphabets in back of book.)
- Clay, A. T. Documents from the Temple Archives of Nippur. Phila. 1906, pp. 17-20.
- Geographical Magazine, April, 1916.
- Contenau, G. La Civilisation phénicienne. Paris, 1926.

- Clermont-Ganneau, Ch. "Inscription égypto-phénicienne de Byblos," in *Recueil d'archéologie orientale*, VI, pp. 74-78 and pl. II.
- Comptes rendus de l'Académie des Inscriptions, 1903, pp. 378 ff.
- "Notes on the Seal found on Ophel, the Greek Inscriptions from Nazareth and Kefr esh Shems, The Siloam Text, and the Tombs of the Kings" in *The Palestine Exploration Fund, Quarterly Statement (Q.S.)* 1897, pp. 304-307.
- Conder, C. R. "Writing" in *Murray's Illustrated Bible Dict.* pp. 952-957. London, 1908.
- The Bible and the East, Edinburgh and London, 1896. (See Ch. IV.)
- The Tell Amarna Tablets, London, 1893.
- Cook, Stanley A. "The Inscription of Aḥiram, King of Byblus," in *Palestine Exploration Fund, Quarterly Statement, (Q.S.)* Oct. 1925, pp. 210-215. See also p. 160.
- "The Old Hebrew Alphabet and the Gezer Tablet" in *Palestine Exploration Fund, Quarterly Statement. (Q.S.)* 1909. pp. 284-309.
- Cambridge Ancient History, III, Ch. XIX. Also Vol. II, p. 334 and Vol. I, p. 189.
- Cooke, G. A. A Text-book of North-Semitic Inscriptions. (Moabite, Hebrew, Phoenician, Aramaic, Nabataean, Palmyrene, Jewish.) Oxford, 1903. 407 pp. and xiv plates.
- Corpus Inscriptionum Semiticarum--ab Academia Inscriptionum et Litterarum Humaniorum conditum atque Digestum (CIS) Paris, 1881-
- Cory, I. P. Ancient Fragments of the Phoenician, Chaldean, Egyptian, Tyrian, Carthaginian, Indian, Persian and other writers. 2 ed. London, 1832.
- Cowley, A. E. The Hittites (The Schweich Lectures 1918), London, 1920. (See especially Lecture iii.)
- "The Origin of the Semitic Alphabet" in *The Journal of Egyptian Archeology (JEA)* III. 1916, pp. 17-21.

- Danzel, T. W. Die Anfänge der Schrift, 1912 (see pl. iv.)
- Deeke, W. Der Ursprung der kyprischen Silbenschrift, Strassburg, 1877.
- "Der Ursprung des altsemitischen Alphabets aus der neuassyrischen Keilschrift," in Zeitschrift der Deutschen Morgenländischen Gesellschaft (ZDMG) 31, Leipzig, 1877. pp. 102-116.
- Delitzsch, Friedrich "Die Entstehung des ältesten Schriftsystems or Der Ursprung der Keilschriftzeichen" 239 pp. Leipzig, 1897. (See especially pp. 209-231.)
- De Rougé, Emmanuel "Mémoire sur L'Origine Égyptienne de l'Alphabet Phénicien." 110 pp. Paris, 1874.
- De Saulcy, F. Recherches sur la Numismatique Judaïque. 192 pp. xix plates. Paris, 1854.
- Dillmann, August Ethiopic Grammar. 2 ed. enlarged by Carl Bezold 1899. Translated by James Crichton. London, 1907. (See especially pp. 17-18)
- Driver, S. R. Modern Research as illustrating the Bible. (The Schweich Lectures, 1908), London 1909 95pp.
- Dussaud, René Les Civilisations Préhelléniques dans le Bassin de la Mer Égée. Paris, 1914. 478 pp. (See especially pp. 421-437.)
- Les Arabes en Syrie avant L'Islam. Paris, 1907. 178 pp. (See especially pp. 57-90)
- "Les inscriptions phéniciennes du tombeau d'Aḥiram" in Syria V, 1924, pp. 135-157.
- "Dédicace d'une statue d'Osorkon I par Elibaal, roi de Byblos" in Syria VI, 1925, pp. 101-117.
- Eisler, Robert Die kenitischen Weihinschriften der Hyksoszeit im Bergbauggebiet der Sinaihalbinsel, 1919.
- "The Introduction of the Cadmeian Alphabet into the Aegean World in the light of ancient Traditions and Recent Discoveries" in The Journal of the Royal Asiatic Society. 1923, pp. 35-73
- Erman, Adolf Aegyptisches Glossar, 1904.

- Evans, Arthur J. *Scripta Minoa* (The Written Documents of Minoan Crete with special reference to the archives of Knossos). I. 302 pp. xiii plates. Oxford, 1909.
- "Further Discoveries of Cretan and Aegean script: with Libyan and Proto-Egyptian comparisons." (Plates ix, x) in *The Journal of Hellenic Studies*. XVII, London 1897. pp. 327-395.
- "The European diffusion of Pictography and its bearing on the origin of Script," in *Anthropology and the Classics*, Oxford, 1908 pp. 12 ff.
- *Primitive Pictographs and Pre-Phoenician Script in Crete and the Peloponnese*. London 1895.
- *Journal of the Anthr. Inst.* XXX. pp. 199 ff.
- Fries, "Die neuesten Forschungen über d. Ursprung d. phönizischen Alphabets," in *Zeitschrift des deutsch. Paläst...Ver.* XXII (1899) p. 118 f.
- Furlani, *Riv. d. Studi Orientali* 10, 1925, p. 591.
- Gardiner, Alan H. "The Egyptian Origin of the Semitic Alphabet" in *The Journal of Egyptian Archaeology* (JEA) III. pp. 1-16. London, 1916.
- Gardiner, Alan and Peet, T. E. *Inscriptions of Sinai*, E.E.F. Memoir 36, 1917. Part I. (See especially Plates lxxxii-lxxxv)
- Gardiner, Alan H. "The Defeat of the Hyksos by Kamōse: The Carnarvon Tablet, No. I." in the *Journal of Egyptian Archeology* (JEA) III. pp. 95-110.
- Grenier, A. *Ecole française de Rome* 41, 1924. 1-41 (for new Marsiliana alphabet.)
- Gressmann, Hugo (with Hoffmann) *Zeitschrift für die alttestamentliche Wissenschaft und die Kunde des nachbiblischen Judentums*, 1924, pp. 349 ff.
- Grimme, Hubert *Althebraische Inschriften vom Sinai*. (Alphabet, Textliches, Sprachliches mit Folgerungen) 99 pp. 23 photographs. Hanover, 1923.

- Grimme, Hubert "Hjatšepšu und die Sinaischrift denkmäler" in Zeitschrift der Deutschen Morgenländischen gesellschaft (ZDMG) 1926, pp. 137-150.
- Halévy, F. Melanges d'épigraphie sémitique, 1874. (See especially pp. 168-189)
- Halévy, J. "Nouvelles Considérations sur l'Origine de l'Alphabet" in Revue sémitique IX (1901) pp. 356-370.
- Haupt, Paul John Hopkins University Circular No. 64. Vol. VII, 1888.
- Herodotus. Books V and VI. Version by George Rawlinson in four volumes. New York, 1882.
- Hill, George F. Catalogue of the Greek Coins of Palestine (Galilee, Samaria, and Judaea) London, 1914 363 pp. and xlii plates. (See especially pp. lxxxix-cxi and table immediately following)
- Hilprecht, H. V. Assyriaca, eine nachlese auf dem gebiete der assyriologie. (Especially p. 114)
- Hirschfeld, "Recent theories on the origin of the alphabet" in Journal of the Royal Asiatic Society, 43 (1911) p. 970 f.
- Hommel, Fritz Geschichte Babylonien und Assyriens. Berlin, 1888. 802 pp. (See especially pp. 49-57)
- Grundriss der Geographie und Geschichte des alten Orients (1904) vi and 400 pp. (See pp. 96 ff.)
- "Astronomie der alten Chaldäer"--a paper read May 29, 1901. See Lidz. in Ephem I. pp. 269-71.
- Jensen, Hans Geschichte der Schrift. 231 pp. Hanover, 1925. (See especially pp. 99-114)
- Jirku, Anton Altorientalischer Kommentar zum Alten Testament. Leipzig, 1923. 254pp. (See especially pp. 141-144.)
- Josephus, Flavius The Antiquities of the Jews. See Complete Works by Wm. Whiston in four volumes. Phila. 1859.
- Kalinka, E. Klio 16 (1920) p. 311.

- Kautzsch, E. Gesenius' Hebrew Grammar, 2 ed in Eng. Oxford 1910. 598 pp. (See especially pp. 27-31)
- KAT³ Schrader's Keilinschr. und der Alte Testament. 3rd ed. by H. Winckler and H. Zimmern.
- Kennedy, A.R.S. "Money" in Hastings Dictionary III pp. 417-32.
- King, L. W. First Steps in Assyrian London, 1898.
- Knudtzon, J. A. Die El-Amarna-Tafeln, Leipzig. 1907-09.
- Lagrange, M. -J. "La Nouvelle Inscription de Sendjirli" in Revue Biblique 1912, pp. 253-259. (See especially p. 256)
- Lang, R. H. "On the Discovery of Some Cypriote Inscriptions" in Transactions of the Society of Biblical Archeology, Vol I. London, 1872. pp. 116-128.
- Layard, A. H. Nineveh and its remains, etc. 2 vols. New York and London, 1849.
- Lehmann-Haupt, C. F. "Zur Herkunft des Alphabets" in Zeitschrift der Deutschen Morgenländischen Gesellschaft, (ZDMG) Leipzig, 1919. Vol. 73, pp. 51-79
- Lenormant, François Essai sur la Propagation de l'Alphabet Phénicien dans l'ancien Monde. Tome Premier. Paris, 1872. 343 pp. xix plates.
- Unpublished history notes recorded in part by de Rougé in his Memoire of 1874.
- Levy, M. A. Geschichte der jüdischen Münzen Breslau, 1862.
- Lidzbarski, Mark Table of Alphabets in Gesenius-Kautzsch Hebrew Grammar, 2 ed. Eng. 1910, p. x.
- "Alphabet" in Jewish Encyclopedia, 1891. I, pp. 439-454.
- Handbuch der Nordsemitischen Epigraphik nebst Ausgewählten Inschriften. Weimar, 1898. Text II. Tafeln (xlvi).
- Theologische Literaturzeitung, 26. March, 1921, Cols. 49-52.. (Book review)
- Nachrichten d. Gesell. d. Wiss zu Göttingen, 1924, pp. 43-48.

- Lidzbarski, Mark Ephemeris für Semitische Epigraphik.
3 vols. 1900-1915. Giessen. (See especially Vol. 1, pp. 109-136; 261-271; Vol. 2, pp. 23 ff; p. 121; pp. 125-139; p. 167; pp. 366-379.)
- "An Old Hebrew Calendar Inscription" in
Palestine Exploration Fund, Quarterly
Statement (Q.S.) 1909. pp. 26-29. (See p.
28 and photograph.)
- Littman, Enno "Die altsinait. Inschriften" in Internation-
ale Monatsschrift XV. pp. 248-262.
- Luckenbill, D. D. "Possible Babylonian Contributions to the
so-called Phoenician Alphabet" in The
American Journal of Semitic Languages and
Literatures. (AJSL) 36. Chicago. pp. 27-39.
- Macalister, R. A. S. "Exploration and Excavation" in Cambridge
Ancient History, Vol. I. Ch. III. pp. 112-144.
- The Philistines--Their History and Civil-
ization. (The Schweich Lectures, 1911)
London, 1913. 136 pp. (The whole book is
valuable but see especially ch. iv.)
- A Century of Excavation in Palestine,
London, 1925.
- Madden, Frederic W. Coins of the Jews, with 279 woodcuts and
a plate of Alphabets. London, 1881. 329 pp.
- History of Jewish Coinage and of Money in
the Old and New Testament. London, 1864.
350 pp.
- Mahaffy, J. P. Prolegomena to Ancient History. London, 1871.
438 pp. (See especially pp. 277-89)
- Maspero, G. Histoire Ancienne des Peuples de l'Orient.
Paris, 1886. 811 pp. (Especially pp. 709-53)
- Meyer, Eduard "Phoeniciā" in Encyclopedia Biblica (E.Bi.)
Vol. III, cols. 3730-3764.
- Montet, M. Pierre "Comment Rétablir l'Inscription d'Abibaal,
roi de Byblos?" in Revue Biblique, July
1926, pp. 321-327.
- Morlet, A. Mercure de France 192, Dec. 15, 1926. pp.
563 ff. Also Apr. 1, 1926. Cp. Literary
Digest, Sept. 11, 1926.

- Müller, W. Max. Asien und Europa nach altägyptischen Denkmälern. Leipzig, 1893. (See pp. 387 ff.)
- Orientalische Literaturzeitung (OLZ) III, pp. 49 ff; 328.
- Murray's Illustrated Bible Dictionary, ed. by Wm. C. Piercy, London, 1908. See plate xxxvi (p. 956) for table of alphabets.
- Naville, Édouard The Text of the Old Testament (The Schweich Lectures, 1915) London, 1916.
- Nöldeke, Theodor Beiträge zur Semitischen Sprachwissenschaft. 139 pp. Strassburg, 1904. (See pp. 124-136)
- Palaeographical Society--Facsimiles of Manuscripts and Inscriptions (Oriental Series) ed. by Wm. Wright. London, 1875-1883.
- Peiser, F. E. "Das semitische Alphabet" in Mitteilungen der Vorderasiatischen Gesellschaft V. (1900) pp. 43-57.
- "Die Assyrische Zeichenordnung, etc." in Zeitschrift für Assyriologie I, pp. 95 ff.
- "Das Princip der assyrischen Zeichenordnung" in Zeitschrift für Assyriologie II, p. 316 ff.
- Peters, J. P. "Recent Theories of the Origin of the Alphabet" in Journal of the American Oriental Society, (JAOS) XXII (1901) pp. 177-198.
- Petrie, W. M. Flinders Researches in Sinai. London, 1906. 280 pp. (See especially pp. 129-132)
- "The Origin of the Alphabet" in Scientia, XXIV. Bologna, 1918. Dec.
- The Formation of the Alphabet (British School of Archaeology in Egypt. Studies Series, Vol III) London, 1912. 20 pp. with ix tables and photographs.
- Royal Tombs of the First Dynasty. Part I. (See pp. 31-32)
- Pilcher, E. J. "The Origin of the Alphabet" in Proceedings of the Society of Biblical Archeology (PSBA) 26, 1904, pp. 168-173.

- Pilcher, E. J. "The Scribings at Sinai" in Proceedings of the Society of Biblical Archaeology (PSBA) XXXI. London, 1909, pp. 38-41.
- "The Order of the Letters of the Alphabet" in Proceedings of the Society of Biblical Archaeology (PSBA) 27, 1905. pp. 65-68.
- Prätorius, Franz "Das kanaanäische und das süd-semitische Alphabet," in Zeitschrift der Deutschen Morgenländischen Gesellschaft (ZDMG) Leipzig, 1909, Vol. 63, pp. 189-198.
- "Bemerkungen zum südsemitischen Alphabet," in Zeitschrift der Deutschen Morgenländischen Gesellschaft (ZDMG) Leipzig, 1904. Vol. 58, pp. 715-726.
- "Zur Geschichte des griechischen Alphabets" in Zeitschrift der Deutschen Morgenländischen Gesellschaft (ZDMG) Leipzig, 1902. Vol. 56, pp. 676-680.
- "Über den Ursprung des kanaanäischen Alphabets" Berlin, 1906. (For English translation see the Annual Report of the Board of Regents of the Smithsonian Institution for 1907, pp. 595-604.
- Prisse d'Avennes Fac-simile d'un papyrus égyptien, etc. Paris, 1847.
- Raffaelli, Samuel "The Epigraphy of Jewish Coinage" in the Palestine Exploration Fund, Quarterly Statement (Q.S.) 1922, p. 154 f. See also Q.S. April 1918 and Oct. 1919.
- Reinach, Theodore Monnaies juives. 2 ed. (Translated by Mrs. Hill (1903) and called "Jewish Coins".
- Reisner, Fisher, Lyon. "Harvard-Excavations at Samaria" 1908-10" 1924.
- Roberts, E. S. An Introduction to Greek Epigraphy, Part I. The Archaic Inscriptions and the Greek Alphabet. Cambridge, 1887. 419 pp.
- Salvolini, Francois Analyse grammaticale raisonnée de differents textes anciens Egyptiens. 1836.

- Sayce, A. H. "The Scribings at Sinai" in Proceedings of the Society of Biblical Archaeology (PSBA) 31 London 1909, p. 132.
- "The Hamathite Inscriptions" in Transactions of the Society of Biblical Archeology (TSBA) V. London, 1877, pp. 22-32.
- "The Babylonian Cylinders" (found by General di Cesnola in the Treasury of the Temple at Kurium) in Transactions of Society of Biblical Archeology (TSBA) V. Part 2. London, 1877, pp. 441-444.
- "The Origin of the Phoenician Alphabet" in Proceedings of the Society of Biblical Archeology (PSBA) 32. London, 1910, pp. 215-222. See also TSBA, 1876 V. p. 30.
- "The Origin of the Semitic Alphabet" in Journal of the Royal Asiatic Society, 1920, pp. 297-303.
- Schaumberger, Johann "Die angeblichen mosaischen Inschriften vom Sinai" in Biblica VI (1925) pp. 26-49; 156-164; 465.
- Schäfer, Heinrich "Die Vokallosgkeit des 'Phönizischen' Alphabets. (Gedanken zur Geschichte des Alphabets.)" in Zeitschrift für Ägyptische Sprache und Altertumskunde. Vol. 52 Leipzig, 1914, pp. 95-98.
- Schneider, Hermann "Die neuentdeckte Sinaischrift" in Orientalistische Literaturzeitung (OLZ) 1921. pp. 241-246.
- Der kretische Ursprung des phönikischen Alphabets. Leipzig, 1913.
- Schultz, W. "Besprechungen" in Orientalistische Literaturzeitung (OLZ) 1914, cols. 210-215.
- Semkowski, L. "Note sur l'Inscription de Ahiram" in Biblica, Vol. 7, Jan. 1926. p. 95.
- Septuagint, The. The Old Testament in Greek according to the Septuagint, ed. by Henry B. Swete.
- Sethe, Kurt. "Der Ursprung des Alphabets" in Nachrichten der Göttingen Gesellschaft der Wissenschaften Gesch. Mitt. 1916. pp. 110-111.

- Sethe, Kurt "Die neu entdeckte Sinaischrift und die Entstehung der semitischen Schrift" in Nachrichten der Göttingen Gesellschaft der Wissenschaften 1917, pp. 437-475.
- "Die wissenschaftliche Bedeutung der Petrie'schen Sinaifunde und die angeblichen Moseszeugnisse" in Zeitschrift der Deutschen Morgenländischen Gesellschaft. (ZDMG) 1926, pp. 24-54.
- "Nachwort" in Zeitschrift der Deutschen Morgenländischen Gesellschaft (ZDMG) 1926 pp. 151-153.
- Smith, George "On the Reading of the Cypriote Inscriptions" in Transactions of the Society of Biblical Archaeology, London, I, (1872) pp. 129-144.
- Smith, J. M. P. "A New Disclosure from Sinai" in Journal of Religion, Mar. 1926, pp. 195-200.
- Stevenson, W. B. "Recent Research Regarding the Early History of the Alphabet" in the Glasgow University Oriental Society Journal, 1925, pp. 73-76.
- "Alphabet" in Harmsworth's Encyclopedia.
- Stucken, Eduard Der Ursprung des Alphabetes und die Mondstationem. Leipzig. 1913. 52 pp. (See ch. 5)
- Sundwall, J. "Der Ursprung der kretischen Schrift." 1920.
- Taylor, Isaac The Alphabet--An Account of the Origin and Development of Letters. 2 vols. London, 1883. 2 ed. 1899.
- Tell el-Amarna Tablets in the British Museum, with autotype facsimiles. (Printed by Order of the Trustees) London, 1892. 157 pp. 24 plates.
- Thomson, J.E.H. The Samaritans--their Testimony to the Religion of Israel. 438 pp. Edinburgh and London, 1919. (See especially pp. 203-235)
- Torrey, Charles C. "The Aḥīrām Inscription of Byblos" in Journal of the American Oriental Society (JAOS), 45 (1925) pp. 269-79.
- "An Inscription of Elibāḥal, King of Byblos" in Journal of the American Oriental Society, (JAOS) 46, Sept. 1926, pp. 237-240.
- Ullman, B. L. American Journal of Archaeology, 1927. Jan.-March number ?. (It will be published in the April-June number, at any rate. I have had access to the proof sheets.)

- Van Drival, E. Grammaire comparée des langues bibliques.
2 ed. Paris, 1873.
- Vincent, L. H. "Les Fouilles de Byblos" in Revue Biblique
April 1925, pp. 161-193.
- Völter, Die althebräischen Inschriften vom Sinai
und ihre historische Bedeutung. Leipzig 1924.
- Warren, Charles The Recovery of Jerusalem (A narrative of
Exploration and discovery in the City and
the Holy Land). London, 1871, 547 pp.
(See especially pp. 473-475)
- Wiedemann, K. A. "Ägyptische Geschichte" 1884 2 vol.
- Winckler, Hugo Geschichte Israels in Einzeldarstellungen,
Leipzig 1895. Vol. 1. 226 pp. (See especially
pp. 124 ff)
- Wright Lectures on the Comparative Grammar of the
Semitic Languages. 1890.
- Zimmern, H. "Zur Frage nach dem Ursprung des Alphabets"
in Zeitschrift der Deutschen Morgenländischen
Gesellschaft. Leipzig 1896. Vol. 50 pp.
667-670.

INTRODUCTION

THE ART OF WRITING

Civilization and the art of writing go hand in hand. Only barbarians lack a definite system of written expression, and as soon as they acquire such a system they are well on the way toward civilized life. The system is not always an adequate one. It may range all the way from a broken twig beside the trail to the neatly type-written letter of our own day. The history of the effort for adequate expression may be said to be the history of civilization itself. Civilized life emerges with the dawn of history, and history depends upon written records.

It is, therefore, interesting to note that at the very dawn of history in the lower Euphrates and Tigris valley we find a people who had already reached a high stage of civilization. They possessed a definite system of writing, first of pictures and later of "cuneiform". It soon became apparent to them that use might be made of the clay that lay in such quantities along the rivers. The stuff was easily molded into soft cakes or tablets which received nicely the impressions or incisions of a little chisel called the stylus, after which the clay was hardened and the record sent away or preserved. Because of the imperishable nature of this kind of writing material, we now have thousands of clay tablets from ancient Babylonia and Assyria which await the time and effort of the translator.

This is no place to enter into a lengthy discussion of the history of decipherment, but merely to state that since the middle of the last century we have been able to read these inscriptions with fair accuracy. We now know a good deal about the daily life of ancient Babylon, of the transactions made and the records kept. We know that there were scribes who "wielded the stylus" on behalf of others. We also know something of the mechanical process. An examination of one of these tablets will reveal a series of wedge-shaped impressions which have evidently been made by the corner of a "stylus" with a square-shaped tip.* An Assyrian relief of the seventh century from the palace of Sennacherib shows a scribe in the act of writing.** He grasps the stylus in the right closed fist, keeping it vertical, while he holds the tablet itself in the left hand at a forty-five degree angle. The square (or triangular) tip of his stylus would, therefore, make the wedge-shaped characters that we have called "cuneiform."


This system of writing was at one time in vogue throughout all Western Asia. It was in use among the Hittites in and around Boghaz-keui during the 13th and 14th centuries. It spread over all Syria and Palestine and even into Egypt and Cyprus during the so-called Amarna age (c. 1400 B.C.). It was used not only for official correspondence but in private letters as well. And so, on account of widespread Babylonian commerce or whatnot, we find the Babylonian cuneiform in use in Canaan (Syria and Palestine), Hatti, Cyprus, and Egypt

* See Clay, Documents from the Temple Archives of Nippur, 1906, pp. 17-20. There may have been a second form of tip with only three corners. See Clay in Geog. Mag. Ap.'16.
 ** See Layard II. 26 or Breasted, AJSL. 32, p. 242.

alongside native script. During the Amarna period it is evident that the Babylonian was used by scribes in Syria and Egypt who were but imperfectly familiar with it. The "Canaanite" glosses* represent a native attempt to make things perfectly clear! So while the script enjoyed a large vogue the attempt was constantly made to adapt it to the native language, as in Canaan and among the Hittites. The cuneiform script was syllabic rather than alphabetic and it was always clumsy at best. There was a great need for simplification and already in the 13th century the Hittites had begun to develop a hieroglyphic script of their own. The tendency a little later to develop the syllabic script of Babylon into an alphabet may be seen among the Vannic inscriptions, and actually accomplished still later by the Persians.

While the stylus and the clay were developing the civilization of Asia, the pen, ink, and papyrus were helping the Egyptians to climb out of barbarism. These writing materials were already common in the Nile Valley in the fourth millennium B.C. As Breasted has so well shown us**there are scores of relief pictures from the Old Kingdom (2980 B.C.-2475 B.C.) which show the scribe at work. He generally stood while writing, with a reed pen in the right hand and a sheet of papyrus held unsupported in the left hand. He occasionally sat (as shown by the famous Louvre statue of a sitting scribe) --probably, however, for protracted dictation.

* See KAT³ pp. 651 ff.; Burney, Judges, p. 166 n and p. 256.
 ** AJSL, 1916, 32. pp. 230-49.

A desk might even be used if the roll was heavy or reference rolls were in use. But for the most part, the Egyptian scribe did his writing while standing, with a reed pen, the fibers of which had been "chewed" into a brush! His outfit consisted in the early day of a wooden palette for mixing the red and black ink or paint, a jar of water, and some reed pens with a case. These were tied together with a cord and thrown over the shoulder, for all the world like a present-day West African (Senegalese) native scribe! The student of Egyptian hieroglyphs is perfectly familiar with this outfit for a picture of it is used to designate "writing", "to write," or "scribe."  The two circular receptacles in the little palette are for the two colors--the black ink made from a mixture of "soot or lampblack with an aqueous solution of vegetable gum," and the red from an "iron oxide." This outfit of the Old Kingdom gave way to an improved equipment which lengthened the little rectangular palette to such length as to provide both the ink recesses and a case for the pens in one and the same wooden piece. There is an example of this later scribal "tool chest" in the Haskell Museum at Chicago University, which still shows traces of both the red and the black!

The Egyptian scribe, therefore, practically painted his inscriptions on papyrus. His pens were really brushes. It is interesting to note from Prof. Sprengling who has worked among the originals* that the Samaritan ostraca were also evidently painted with a brush.** Nor is this the only indication

* Breasted p. 248.

** These ostraca may date from the early half of the 9th century. See Harvard Excavations at Samaria, 1924.

of the Egyptian influence upon the writing of Asia.

Take the matter of papyrus. We know from the story of Wenamon that the king of Byblus in the last quarter of the 12th century exchanged timber for 500 rolls of papyrus from Egypt*. We also remember that at that time books were brought forth and consulted, and from the conversation it would appear that they had been in use for a long time at Byblus. Just when papyrus reached Greece is a mooted question, but as Breasted points out, it must have been at a time when Byblus was the chief Phoenician port. Otherwise the Greeks would not have named papyrus *βύβλος*. It would, therefore, seem that the Phoenician city of Byblus was for a long-standing period familiar with the use of papyrus.

Another indication of Egyptian influence upon the mode of writing may be seen at a little later period in the Assyrian reliefs. In these reliefs of the Assyrian Empire wherever there appears a scribe writing in cuneiform there is almost always a second scribe who writes with a pen on papyrus! Breasted says: "In the reliefs of Tiglath-pileser IV, Sargon, and Sennacherib I find no less than seventeen such scenes, and I have no doubt that a careful examination would disclose others."**

There is a specially interesting eighth century relief found by von Luschau at Senjirli, where a scribe stands before

* See Ancient Records of Egypt IV, par. 582.

** AJSL. 32. pp. 245-46.

the Aramean king of Samal with an unmistakable Egyptian writing outfit in his left hand.* And there is no doubt that this is a "gsty" $\overline{\text{𐤂𐤁𐤓}}$ (the Egyptian name for the equipment), because in three different places (9;2,3,11) Ezekiel himself mentions a man having at his girdle a 𐤅𐤓𐤁𐤓 𐤓𐤓𐤔 . The 𐤓𐤓𐤔 or 𐤓𐤓𐤕 is easily identified with g-s-t. The name as well as the outfit was borrowed from Egypt!**

When did the "gsty" come into Asia? We do not know. We know it was there in the eighth century and probably as early as 900 B.C., depending upon the date of the Samarian ostraca. We also know that papyrus was used in Syria as early as 1100 B.C., with indications of a still earlier use, and its use would naturally call for the pen and ink. The pen and ink and papyrus in Syria at this time would hardly be used for hieroglyphs and certainly not for cuneiform! There must have been a native script, and we now know that they were using an alphabet in Byblus just one hundred years before Wenamon's visit there.*** This alphabet, furthermore, indicates a previous use of at least a century or two. We are, therefore, back in the very period when cuneiform was at its height in all western Asia.

This is a most interesting period. It must have been somewhere around 1400 B.C. that the Israelites entered northern Palestine. We shall not attempt to name the exact date, for that would be futile in the face of the several theories.

* Aramaic alphabetic script appears upon the face of this same relief.

** W.M. Muller, OLZ.III. pp. 49 ff., 328.

*** See our Chapter I.

But whether the Habiru of the Amarna letters were the Hebrews or not, we know that this period was a time when bedouin tribes from the desert entered Canaan. If the entrance of the Israelites took place 440 years before Solomon built his temple (see I Kings 6:1), then they came in some time in the 14th century--just at the time all the petty kings of Palestine and Syria were writing their cuneiform letters. Less than a century later we discover an alphabet in use at Byblus. Where did this alphabet come from? Was it an out-and-out invention? If so, who were the inventors? What factors influenced the invention? This is our thesis, to which we devote the following chapters. *to answering these questions*

THE EARLIEST ALPHABETIC SCRIPT.

In dealing with the origin of the alphabet, it is, of course, necessary to begin with the first authentic cases of its use, and from that point work back as best one can to its genesis. It is then our first duty to call in review the earliest of the epigraphical materials upon which an intelligent discussion of our thesis can be based. Thanks to certain excavations in Phoenicia, our knowledge of this early "Phoenician" script has been greatly augmented within the last three or four years. The origin of the alphabet, in fact, has been pushed farther back into antiquity, and if the origin has not been revealed, the greater antiquity of the alphabet has, at least, created certain well-founded implications. We hope, in the midst of these pages, to uncover all of the relations of script with script and to examine them in the light they cast upon our problem, but for all practical purposes it is well to begin, where the ancients began, with Phoenicia--the home (and birth-place?) of the first pure alphabet.

BYBLUS

Some twenty miles north of Beyrout, Syria, on the Phoenician coast, is the unimportant modern village of Jebeil. Now numbering scarcely one thousand Moslems and Christians, it at one time ranked in importance to Phoenicia with ^{Sidon} Beyrout itself. We learn from Ezekiel (xxvii 9) that Gebal (its Old Testament name) was famous in his day for its ship-building.

industry. Even the Book of Joshua (xiii 5) and the Book of Kings (III. vi 8) speak of the people of Gebal. During the Amarna period the city was holding sway over a good share of the Phoenician coast, including Berytos, Sigata, and Ambi. We learn in the Amarna tablets and also in the papyrus Anastasi that Byblus (which was the name the Greeks gave to the city) was the home of a goddess, who on a Phoenician stele from Byblus is called Isis-Astate-Belit. A Phoenician writer, quoted by Philo of Byblus, Sanchoniathon by name, gives us the background for the later Venus and Adonis mythology of the place. The chief of the gods, it appears, was El, who gave the city of Byblus to Ba'al-tis, his wife, who, in turn, had a lover named Elioun. Elioun is at last killed either by El himself (so one version goes), or in a chase after a wild boar. We are chiefly interested here in the fact that Byblus was the home of this Phoenician Astarte--Ba'al-tis--, and we are further interested to know that she was well-known to the Egyptians as Hathor, which name they were accustomed to give to other local goddesses in other places.*

In 1919 the French began excavations on the site of the ancient Gebal. One of their outstanding discoveries was an Egyptian temple of the Old Kingdom, dating from somewhere between 2900 and 2500 B.C. Statuettes and vases were found bearing such names as Men-Kau-Rê, Men-Kau-Hor, and Ounas of the IVth and Vth Dynasties, and Pepi I and II of the VIth

* This practise was evidently followed at Serâbît el-Khâdim in Sinai where the local "Ba'alat" was called Hathor in many of the hieroglyphs from there.

Dynasty. At the beginning of the second campaign in the Autumn of 1923, M. Montet, the director of the work, began digging in the necropolis that has been known for more than fifty years to have existed there. There he unearthed, close together and very near the sea, four under-ground tombs of the XIIth Dynasty. They were dated, of course, by their contents--now, for the most part, at the Beyrout Museum--which are miscellaneous in character and easily contemporary with the Amenemhâts at the end of the XIIth Dynasty. There were also a couple of hieroglyphic inscriptions bearing the name Ma'a-kherou-rê, not to mention Ypsemouabi, prince of Byblus. All of these finds, together with what had come from here in earlier days, bear in upon us anew the conviction that Byblus was an early important Egyptian center of interest, due, of course, to its trade in cedars. From the above names, and for other reasons which we shall presently discuss, there is also evidence to suggest that Babylonia was early attracted to this place for the same reason. It must be clear to anyone who examines the slim Phoenician coast line that these cities could thrive only by trade. They undoubtedly went to sea very early, and perhaps some of the forty ships that Snefru of the 3rd. Dynasty sent to Byblus had been originally built in her dry-docks! We recall again the vivid experiences of Wenamon who in the XIIth century came from Egypt to Byblus to exchange papyrus rolls for timber. We recall that at that time it was indicated by the king of Byblus that such commercial relations had long existed between the two countries, and--more pertinent to our problem--journals and writing were

referred to. It is now clear that the papyrus was used in that XIIth century not only for hieroglyphs but for an alphabetic writing. It is evident also that the use of pen and ink, and alphabet, went back to at least the XIIIth century, and probably much further. Like Kirjath-Sepher, the name "Byblus" may have a pointed significance.

Removed slightly from the four hypogeums mentioned above, and not so near the sea, is a fifth one, with its shaft on the west side of the funerary chamber, which, in turn, is a good-sized room or cave dug eastward from the side of the square shaft. Six beautiful corinthian columns of a later date stand almost above this subterranean vault. The tomb itself is later than the other four. As one descends the shaft by ladder today, he may see on the south wall midway up from the floor a grafitto roughly made in the "Phoenician" alphabetic characters. It is not easy to read them from the ladder, but there they are--in three short lines. At the end of the second line is a hitherto unknown character which looks something like a Hebrew "shin".

But you proceed to descend the ladder to the bottom of the shaft and enter the lateral chamber, where, you are told, they found three splendid sarcophagi. The center one, and the most imposing of the three, now reposes in the museum at Beyrout. They were, however, empty when Montet found them. Presumably in the seventh century, ^{B.C.} the tomb had been entered and robbed of most of its contents. The date when this violence took place is indicated by the presence of some

Cypriote ware of that period which had evidently been left behind by the plunderers. Furthermore, they fortunately overlooked some Mycenaean and later Cypriote ceramics which are strongly characteristic of the second half of the second millenium, and authorities tell us that the Mycenaean ware is of a beautiful fabric and is not a degeneration of a later period. Moreover, an ivory plaquette of Aegaeon-Cretan origin, which by its superiority seems to be even more ancient than the deteriorating ivories of Enkomi (dated in the 12th and 11th centuries), adds to the accumulated evidence that the tomb was made and its contents placed therein not later than the latter half of the 13th century.* But that is not all! Two alabaster vases bearing the cartouches of Ramses II (1292-1225 B.C.) were fortunately discovered by Montet--one in the shaft and the other in the chamber itself. The latter one, composed of six or seven pieces, has been reconstructed and stands on a shelf in the Beyrout Museum.

The thing that concerns us most is the sarcophagus at Beyrout. There it stands in the middle of a room--the center of interest--because of its beauty, its unique figures, and its inscription. The whole coffin seems to rest upon the backs of four crouching lions, their heads protruding from under, and resting upon their own huge paws. The dimensions of their heavy burden are about $6\frac{1}{2}$ by 5 by 4 feet. The cover is likewise ornamented on the top with two lions, one at each of the rounded ends. On the upper edge of all four sides is

* I hear rumors that this date is now being challenged. I have, however, read nothing apropos. M. M. Dussaud and Vincent (Syria, 1924, Pt. ii, p. 135; Revue Bib., 1925, Apr. p. 161) are my authorities on the pottery.

a frieze, of alternating lotus flowers and buds. Under this frieze, and with their feet on a base line drawn just above the lion's backs, are human figures. On the two long sides of the sarcophagus a common theme represents a Semitic king receiving upon a table before him the offerings of a whole line of porters. The offerings consist of such things as baskets of fruit and a goat. On the two ends of the sarcophagus are dancers in strange costume represented with hands above their heads or held at their breasts. The coffin is certainly fit for a king--for a Semitic king, at any rate.

AHÎRÂM

But we have not yet mentioned the most significant thing about the sarcophagus.

It bears an inscription in the ancient "Phoenician" alphabet, and if the tomb and its contents are properly dated at the 13th century, we have in this script a sample of the alphabet four centuries older than that found on the Moabite Stone. It runs in a single line around one end and one side, beginning on the end. ^{Strangely} (Queer) enough, that part of the line that appears on the end is engraved along the upper edge of the box itself, while the remainder of the line is carved along the long side of the lid. The inscription, for the most part, is in very good state of preservation, but the end of the line seems to have been finished up in a hurry. It is difficult to make out. The rest is simple enough (with an exception or two) but we are interested to note again in eight instances that same peculiar character we saw on the side of the shaft. It is a "kaph" without its tail! Another unfamiliar form is the "aleph", which looks like ~~some of us make~~ a capital K.

The vertical stroke, instead of going across the two diagonals and forming what we have been pleased to call an ox head, is seen here to be at the left of them. The only other significant peculiarity in the palaeography is the "mēm" which is vertical rather than horizontal, and recalls the "mēm" in the Gezer "Calendar." Torrey* suggests that since this form occurs also in the Abi-Baal inscription from Byblus (to be noted later) that it may be a local peculiarity designed to save space. He also calls attention to the unusual slant to the left of the "resh," and occasionally of the "gimal", the "he," and the "waw," but these are not essentially archaic. As far as the "kaph" is concerned, it appears in the tenth century on two other inscriptions from Byblus, but by this time, the "āleph" had undergone a slight change in the direction of the later form that appears on the Moabite Stone.

The characters on the sarcophagus and on the shaft seem to be contemporaneous. The grafitto is supplementary to the extent of a "daleth", which does not happen to appear on the sarcophagus. "Ṣādē," "qōph," and "sîn" are in neither place. Dussaud regards the grafitto as a warning to the molester to quit his digging! Although there is no parallel for this practise, so far as we know, this must be the significance. What else it could signify is difficult to say. Vincent, in connection with his article,** has given us a very good photograph of the grafitto. We reproduce the characters from this photograph at the top of the next page.

* JAOS. 45. pp. 269-279

** Revue Biblique, Apr. 1925, pp. 161-193.



Dussaud reads the three short lines as follows: (1) $\text{נ} \text{ט} \text{ד} \text{ל}$
 (2) $\text{ב} \text{ד} \text{ל} \text{נ} \text{י}$ (3) $\text{ן} \text{ן} \text{ן} \text{ן}$ which he translates "Avis!
 Voici! Ta perte (est) ci-dessous."* Torrey reads: "Take
 notice! Strength will fail you below this point!"** He has
 done this in spite of the fact that our knowledge of $\text{ן} \text{ן} \text{ן}$
 comes from late Hebrew and Aramaic dialects. Vincent***
 thinks he reads a ן after the first word, (as above), and
 that over the "daleth," which was an error, he sees traces
 of a "pē." (see above). He would, therefore, read, "Avis!
 Prends garde à toi, là-dessous!"

Turning our attention to the content of the sarcophagus inscription, we note that it is "a sarcophagus which Ittô-baal, son of Aḥîrâm, king of Gebal, has made for his father, Aḥîrâm." But before we proceed further, it will be well to get the original before us. We choose again Vincent's facsimile given in Plate VIII of the above mentioned article. It is given here in four lines, the first one representing what appears on the end of the sarcophagus and the second, third, and fourth that which is found on the side.

* Syria, V, 1924, p. 143

** op. cit. p. 277.

*** op. cit. p. 189.

simple "taw." They also seem to have agreed that two additional characters were necessary to fill the gap. All but Torrey, therefore, read "Aphasbaal or Ipphesbaal." He preferred 𐤀𐤕𐤁𐤁𐤏 since 𐤕𐤁𐤏 was already familiar in Phoenician names. But Montet's original reading had been the more familiar Itho-baal, and this was adopted without hesitation by Vincent. Dussaud himself has recanted since reading the original in favor of "Ito-baal." * Albright** has also examined the original carefully and is sure that "Ittô-baal" --"With him is Baal"--is the correct reading. The present writer, after a similar examination, arrived at a like conclusion. We may therefore presume that this difficulty has been settled.

There is also a lack of agreement as to the force of the letter } which follows }𐤏, and is, in fact, separated from it by a short perpendicular bar, but between it and the following verb there is no separation. Vincent treats the "zain", therefore, as a relative rather than a demonstrative, (following the suggestion of Lidzbarski***) but the majority of the scholars prefer the more concrete demonstrative. Either reading is permissible. It is strange, nevertheless, that a demonstrative should be severed from its noun and thrown with the verb. The only other certain instance of this phenomenon that we know of is in the Elibaal inscription which likewise came from Byblus, and which we shall presently discuss. The other instance of this pronoun

* Syria VI, 1925, pp. 106-7.

** JPOS. VI, 1926, pp. 75-102.

*** Nachrichten d. Gesell. d. Wiss. zu Gottingen, 1924, pp. 43-48.

within the Aḥîrâm inscription itself is spelled]], and is undoubtedly the demonstrative. This form is not Hebrew. It occurs in the stele of Byblus (CIS. I 1), but disappears later from Phoenician usage. It is retained, however, by Aramaic in the emphatic form,]]]. The other form near the end of our inscription that has been taken by most to be] 𐤒𐤕𐤕 is] 𐤒𐤕𐤕. An examination of the original will convince anyone of this fact. Both Dussaud and Albright have come to this conclusion.

We believe that the inscriptions of Aḥîrâm and Elibaal begin thus in a rather indefinite way with the use of the relative. However, it is interesting to note that this early Phoenician inscription is in keeping with the generality of all Phoenician and Canaanite usage (outside of Hebrew) in the lack of the definite article with the demonstrative, either] or]]. It is found occasionally with the noun but never with the pronoun, and certainly not with both, as in the Hebrew. Can it be said, with Dussaud, that the old Canaanite language did not possess this article? Torrey* objects to this supposition as without foundation. Where, he asks, would the article have been used in the Aḥîrâm inscription? He does admit, however, that the use of the article with the demonstrative is superfluous, and a conventionalized use found only in Hebrew. Dussaud suggests that this use may have been introduced into Canaan by some new-coming dialect, such as the Safaïte.

* op. cit. p. 276.

Another noteworthy usage in the Phoenician of this period must have been the use of $\overline{\text{ST}}$ for the third masculine singular suffix. It occurs in this first line in connection with "his father," and in three other places. This is good Hebrew and Moabite usage, but it does not agree with later Phoenician texts which (outside of Byblus) utilize the "yod." Nor does it agree with the later Byblus usage which was, in the tenth century and later, the "waw." This "waw" was retained for a long time at Byblus.

Before completing the translation of line one, it will be well to call up another peculiar form found in the second line. We have an instance of the preservation of the older form of Sy . The longer form, Sy , of which the shorter is a mere abbreviation, is the Arabic Sc , and is preserved in Hebrew poetry in several places in the Old Testament. This older form undoubtedly explains the presence of the "yod" before suffixes. We will find the longer form again on the Elibaal inscription, providing Dussaud's reading is correct. The same duality of orthography in Kalamu, lines 7 and 8, called forth the suggestion several years ago from Father Lagrange* that Sy means "aupres." But the meaning here surely carries the idea of "attack." It is more than probable that each form can have the same meaning. It is interesting here to note that as early as the thirteenth century an author could have his choice of either form.

* Revue Bib., 1912, p. 256.

Still another usage should be definitely mentioned. In the second line there are two verbs which look like "hithpael" that have undergone metathesis. But the first radicals are not sibilants. So, if this is metathesis, the presence of sibilants has nothing to do with the phenomenon. They are $\eta\sigma\tau\tau\eta$ and $\tau\sigma\tau\eta$. The root $\eta\sigma\tau$ is not definitely known, but it is probably connected with the Hebrew $\eta\sigma\tau$ "strip off," etc., and the Arabic خشف . Torrey suggests that the Hebrew meaning was derived from the Arabic word, which in ordinary use, the sound of cracking or breaking often plays a part--cracking of a shell of ice. (Cf. Ps. 29:9). Bauer assumes that $\eta\sigma\tau$ has become $\eta\tau\sigma$ "overthrow," which, of course, makes good sense, but whether it is permissible is another matter. The root $\tau\sigma\tau$, on the other hand, is a common Hebrew word meaning "turn or overturn." The hithpael $\tau\sigma\tau\tau\eta$ appears in Job 38:14 but $\tau\sigma\tau\eta$ does not occur in Hebrew. A similar form occurs in the Moabite Stone (lines 11, 15, 19, and 32), and possibly in Kalamu 10 ($\tau\sigma\tau$), and have for a long time passed for "Arabisms." It is now demonstrated that they are not such, but ancient Canaanite "hiftael" forms conforming to the Assyrian and the Arabic.

In connection with these verbs are the nouns $\tau\sigma\tau$ and $\eta\sigma\sigma$, which are both masculine in Hebrew, Aramaic, and Syriac. But the verbs are feminine forms. However, when one notices that the Assyrian *kussū* and *ḥaṭṭu* (also presumably *ḥuṭaru*) are always feminine (as pointed out by Gressmann, Torrey, and Cook*), we are forced to see Babylonian-Assyrian

* Q.S. Oct. 1925.

influence in Byblus during the thirteenth century. To this may be added the names of native princes written in hieroglyphs which Montet found in the other tombs and which we have mentioned above. Cook recalls to our notice that the name Athaliah has been plausibly explained through the Assyrian "etellu" (Yah is high). Furthermore, we know how great Assyrian influence was in Phoenicia during the Amarna period and there is no reason to suppose that it did not exist both before and after that time.

Before summarising our results, let us finish the translation. The end of line one is a bit puzzling. The words כשתה בעולם were first translated by Dussaud as "comme sa demeure pour l'éternité", and in his second article he allowed this translation to remain. If the last word is "eternally" one would of course expect a "lamed" instead of the "beth." Can it be a scribal error? Albright equates it to the Late Hebrew בעולם אבא, "in the other world," and remarks, "we must not forget that it is precisely in Late Hebrew (Eccles.) that such characteristic Phoenician expressions as בית עולם and תחת השמש come into use." * Torrey, on the other hand, wonders if it might not be a popular abbreviation for בית עולם, "tomb," but Albright thinks this supposition is unnecessary. Vincent follows Dussaud, and Bauer attempts to translate only "his room." Lidzbarski also makes the last word "für die Ewigkeit," but attempts a reconstruction of the penultimate word on the basis of an abbreviation of אד, and

* op. cit. p. 79.

renders "here he placed him." This is most unlikely. Torrey thinks the 𐤓 stands for 𐤓 which is found in several places in the Old Testament for 𐤓𐤕𐤕𐤓 , and so translates the phrase "when he placed him." This makes poor sense with the rest of the sentence and besides, as Albright points out, the verb 𐤓 "to place, set," in Phoenician generally means "set up, establish." Hoffmann explains the word as the infinitive (𐤓𐤕𐤕 for 𐤓𐤕𐤕𐤓) of 𐤓𐤕 , "to sleep." His syntax is bad, however, but Albright takes up his idea, equating 𐤓𐤕𐤕 with the Hebrew שֵׁנָה , the Assyrian 𐤓𐤕𐤕𐤓 , but with the local sense of "place of sleeping," -- "just as similar Assyrian infinitive 𐤓𐤕𐤕 (Heb. שֵׁט) and 𐤓𐤕𐤕𐤓 for 𐤓𐤕𐤕𐤓 (by partial assimilation of i to following labial) have developed meanings "place of rising" (𐤓𐤕𐤕 𐤓𐤕𐤕𐤓 = east) and "place of sitting, abode". We are inclined to accept this suggestion but reserve our judgment on 𐤓𐤕𐤕𐤓 .

The second line surely begins with a conditional particle of some kind, but its syntax has puzzled all who have worked on it. The word 𐤓𐤕𐤕 was first explained by Dussaud on the basis of the very late Hebrew word for "if," namely, 𐤓𐤕𐤕 from which our word was derived by means of a contraction of 𐤓𐤕𐤕 and 𐤓𐤕 , which is most unlikely. Vincent, however, is perfectly correct in preferring this meaning to Lidzbarski's arabic "Bei Gott!" Bauer translates: "And concerning, etc." Torrey prefers to translate 𐤓𐤕𐤕 as 𐤓𐤕𐤕 "And to any king, etc." He comments upon this rhetorical introduction to the threat by remarking: "I believe that the previous translators of the inscription have gone astray at this point because of failure to understand the euphemistic

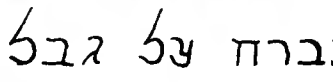




use of the third person, instead of the second person, in the direct address ("The scepter of his rule," etc., meaning "The scepter of thy rule," etc.). I have called attention in more than one place (see ZAW., XXVI, 81 ff.) to the current misunderstanding of the last clause in the Tabnith inscription because of the unexpected use of the third person, instead of the second, where the curse is uttered, precisely as in the present case and in still others." He feels that if this conventional usage is taken account of everthing becomes clear. His full translation of the second line (i.e. the line upon the side of the sarcophagus) then runs: "And to any king among kings, or governor among governors, or military commander over Gebal, who has uncovered this sarcophagus (it is said): The scepter of his rule shall be broken, the throne of his dominion shall be overturned, and peace shall flee from Gebal, if he shall destroy this inscription, cover it over or deface it." Bevan, on the other hand, suggests to Cook (see the latter's article) that Phoenician usage calls for the negative "do not," and that this word would be the natural particle of dissuasion or prohibition, which in Hebrew, at least, need not be followed by a verb. Albright (working with Mr. Rosenblatt), on ^{his} ~~their~~ part, came to the conclusion (with the majority) that a hypothetical sentence is here introduced (indeed, Hoffman introduces a second, "and if anyone lay bare this sarcophagus", etc.), and that a verb must be inserted to secure an apodosis and eliminate the syntactical difficulty. They place the verb לֹא (for Heb. לֹא) just before לֹא , claiming that it had

been omitted (even as the kaph in "officers") by haplography. Albright himself stumbled upon the Hebrew ⁷פֶּרָא, "peradventure, perhaps, if, in case that," etc., and according to its usage in Gen. 24:5 and Hos. 8:7, the פֶּרָא in this case is identical. This explanation is very plausible.

We like also Albright's suggestion that it is unnecessary to translate "king among kings," etc., which, like the Arabic "qaṣrun min quṣūri l-malik," is merely the Phoenician way of saying "any king." He, therefore, renders the second line after this fashion: "And if any king or prefect or commander of a host attacks Gebal and opens up this sarcophagus, may the scepter of his rule be broken, may the throne of his sovereignty be overturned, but let peace hover over Gebal; as for him, may his writing be entirely effaced from the earth."

It will be noted that Albright has adopted the same meaning for אֲמָנָא that Torrey had suggested. The word that follows, אֲמָנָא, is of course connected with the verb אָמַן, "encamp." (See Panammu, lines 13, 16, and 17). It seems to be the construct for "camp." The word אֲמָנָא was new, but since in the old Aramaic inscriptions of Zakir, king of Hamoth, and of Panammu, king of Ya'di, the idea of "camps" (i.e. armies) being led, etc., occurred, the majority of scholars have been led to see in the new word the idea of "setting up, pitching, or establishing and even leading" a camp against Gebal. Torrey has undoubtedly discovered the correct meaning of the first word. From the Assyrian root amū, "speak," comes the secon-

dary form, tamû, which is very old in the Assyro-Babylonian speech. Torrey tried, by analogy with the Arabic amîr, "commander," etc., to establish for tamû the meaning of "Commander," but did not realize, as Albright points out, that tamû actually does mean "command." So, the translation of "military commander" or "commander of a host" is very likely, indeed, and again shows Assyrian influence.

An examination of Torrey's and Albright's renderings above show a decided difference of opinion on the translation of the end of the inscription. Torrey has "and peace shall flee from Gebal", while Albright renders "but let peace hover over Gebal." The letters on the sarcophagus are unmistakably as follows: . The idea of peace fleeing away from Gebal is hard to understand. Why should Ahiram's city be cursed along with the invading king or general? Lidzbarski had translated "und der Friede fliehe von Gebal," on the hypothesis that the preposition  here takes the value of the Hebrew , and the Arabic . This is, of course, not the ordinary sense of the preposition, but as Cook remarks, "it ^{est} may be admitted that the prepositions in Phoenicia have noteworthy forms and usages." Semkowski* also comments briefly on this use of  in Daniel 6:19 and 2:1, and compares Esther 6:1 (although without the preposition). Torrey has evidently followed Lidzbarski in choosing the unusual sense in order to make sense with the verb. In Biblical Hebrew the verb brh means "flee," and as Albright points out, it still

* Biblica, Jan. 1926, Vol. 7, p. 95.

means "fly, soar" here.* Dussaud had, in his second rendering, translated: "et la paix régnera sur Byblus." Vincent rendered it, "et que la paix plane sur Gébal!" The idea of "hovering over" must be correct. Bauer had the idea of "come upon Gebal." The thought of peace fleeing from Gebal is impossible.

Due to the obscurity of the paleography of the next and last phrase, there has been no sure results obtained. Albright has done better than his predecessors. Before his article appeared, Vincent's rendering was the only one that approached a real translation. He had read: "Quant à celui qui effacerait cette inscription, que soit anéanti pour lui (tout) rejeton!" It will be noticed that he read רפד , and so also did Lidzbarski, Bauer, Torrey, and Dussaud at first. But on examining the original, Dussaud, Albright, and the present writer have felt sure that a "hē" is to be read here in place of the supposed "zain." With the use of only the facsimile, Giron had arrived at the same conclusion.** The next word is sure, but the last one is not. Dussaud continues to read it ררר ; so also Bauer; Torrey changes the "resh" to a "beth"; Vincent conjectures רר[ח]ל[ד] ; while Lidzbarski refrains from attempting a translation. The last phrase,

* According to Albright, it is originally a variant of prh , "to fly," by partial assimilation, just as Bib. Heb. npš "breath" appears in the inscriptions of Kilamûwa and Panamûwa.

** Syria, VI, p. 106 f.

therefore, reads $\text{לְפָנַי} \mid \text{סִפְרָא} \mid \text{יָמָא} \mid \text{אֲנִי}$ followed by a word which may be לְפָנַי , but which Albright claims is לְפָנַי . He thinks that the "mem" and the "taw" are perfectly clear! As a matter of fact, the present writer cannot claim that they are. His own copy was made without reference to the meaning of the translation, and he finds that he has a "shin;" but since Albright claims to have made his copy before he thought of the meaning, we are ready to concede that his more careful examination may have yielded him the correct reading. He claims that the Hebrew לְבָנָה and the Assyrian tabalu meant primarily "dry land, continent" and came to mean "earth, world," (not universe) in distinction from eres, "land." As to the assimilation of the "nun" to the following letter, the same thing is found in the Moabite Stone. The נָא is, of course, simple enough--a niph'al jussive of a נָא verb, "will be effaced." The syntax is cleared up by "his writing" instead of "this writing or inscription." One would have to assume a double threat in order to read "whoso blots out this writing," but that is no longer necessary. The אֲנִי is now a simple nominative referring to the same person mentioned throughout--"and as for him"--and the suffix in "his writing" refers back to the same person. We read, "and as for him, may his writing (not inscription) be effaced..." This much is certain. Albright adds, "entirely from the earth." Torrey reads a couple of infinitives absolute-- לְכַסּוֹת "cover over" and לְבַלְעוֹת "besmear," but they seem far-fetched! Lidzbarski refuses to translate. Bauer was led to suggest that the original ending of the inscription was "and let him be

blotted out!"--that all that came thereafter, including "this writing," etc. (whatever it might be) was the signature of the engraver. Such a practise is found among the Nabataean inscriptions, and the archaic Phoenician inscription of Nora (CIS. i. 144) has a similar ending. But Bauer has not demonstrated satisfactorily that such is true of this inscription. Cook has nothing to offer.

What, then, have we found? (1) The demonstrative pronoun 𐤅 is used at Byblus from the time of Ahîrâm to the period covered by the stele of Yehavmilk (CIS. I 1) after which it disappears from Phoenician use. It is not Hebrew but Aramaic. (2) The use of 𐤅 as a relative (if such it be) is likewise evidently confined to Byblus from the thirteenth to the tenth centuries. (3) The lack of the definite article with the demonstrative pronoun is not Hebrew but "Canaanite." Where the Hebrews got their conventionalized use of the article we do not know. (4) The use of 𐤅 for the third person masculine singular suffix disappears later from Byblus and all Phoenicia, only to show up as regular in later Hebrew and Moabite. (5) The older form of 𐤅 seems to have been the old "Canaanite." form derived from Assyrian and Arabic, which was abbreviated, and in the transition, passed on to the Hebrews. (6) The "hifael" forms are an indication of an old "Canaanite" form conforming to the Assyrian and the Arabic. (7) The agreement in gender of two nouns with the Assyrian, when they do not conform to Hebrew, Aramaic, or Syriac gender, suggests direct Assyrian influence. (8) The

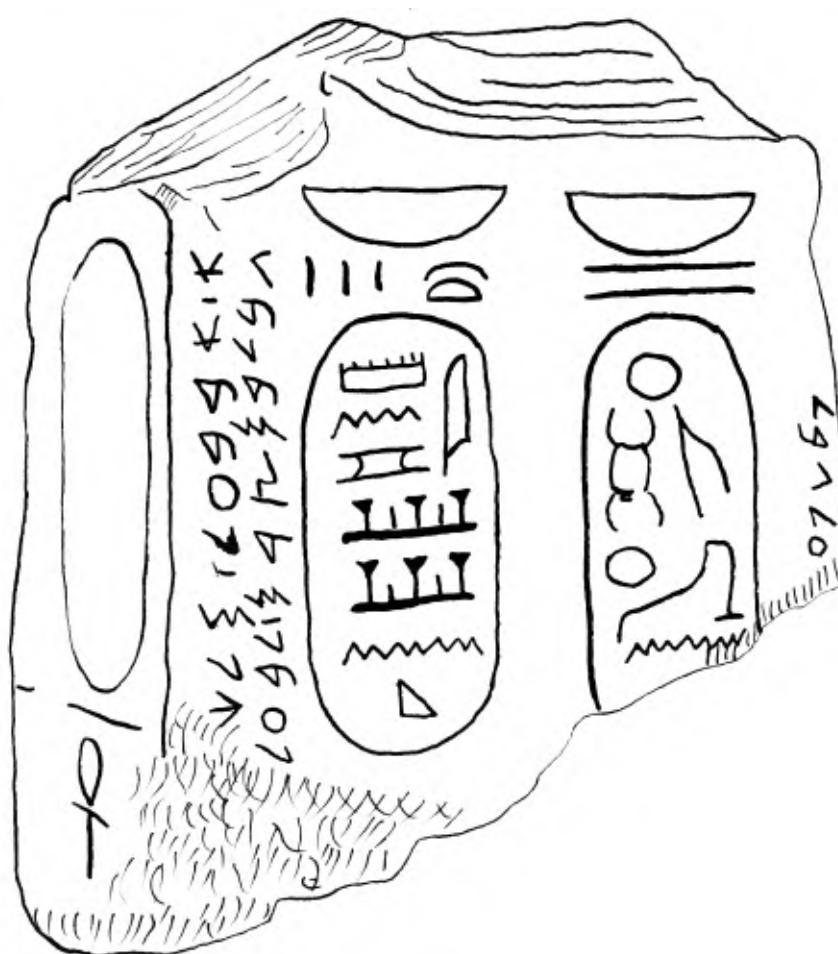
unknown 𐤏𐤍𐤏 evidently comes from the Assyrian tamû, again showing Assyrian influence. (9) The language of this inscription is characteristic of that used in the glosses of the Amarna Tablets, especially of those from Byblus itself.* (10) The script shows signs of previous long use. The letters are not lapidary but distinctively cursive.

ABI-BA'AL

We now pass on to a more brief consideration of two other inscriptions from Byblus. They, too, reveal some of the above peculiarities and, coming from Byblus, they are of extreme interest in dealing with the early script and language of that city. These inscriptions are not, however, from the thirteenth century but from the tenth. The first with which we shall deal was discovered thirty years ago at Byblus by M. Loeytved. It is written on the right side of the seat of a very small throne on which the king had been seated. The king himself was gone with the exception of a small portion of his leg and garment. But on the throne is his name--even Shishak I of Egypt, who died in 924 B.C. The statue has been made from the granite of Egypt and was probably cut in Egypt. It measures 25 cm. by 22 cm. Around the two cartouches of the Egyptian pharaoh a local engraver has carved an inscription in the ancient Phoenician letters. As the fragment now exists, there are on the left margin two vertical lines of this inscription and on the right margin a single bit of line, which is seemingly the end, for it reads from the bottom to the top and does not come clear to the top. Montet has attempted a reconstruction on the

* See Vincent and Cook, op. cit.

analogy of the second inscription which we shall presently discuss, and has successfully demonstrated that the inscription began at the top of the left-hand vertical line and was continued in the other left-hand vertical line (from the top), then in a single line under the two cartouches, turning up the right-hand margin to conclude.* We reproduce here Montet's drawing which he gives in Plate VI.



This inscription was first published by Clermont-Ganneau in 1903,** and later by Lidzbarski.*** The last really readable letter in the first line looked to Ganneau like a "shin," but since it had the form of the "shin" on the stele of Yehavmilk, he could not consent to dating the statue (or at least the Phoenician inscription) to the time of Shishak.

* *Revue Biblique*, July 1926, pp. 321-27.

** *Comptes rendus de l'Academie des Inscriptions*, 1903, pp. 378 ff. and *Recueil d'archeologie orientale*, VI, pp. 74-78 and pl. ii. See *Repert. d'epigr. semit.*, no 505.

*** *Ephem. für semit. Epigr.* II, p. 167.

Lidzbarski also recognized the unusual form of this letter but neither of these scholars recognized it for what it was. Not until after the discovery of the Aḥîrâm inscription, did anyone find out that this was not a "shin" but a "kaph." It is, in fact, the same archaic "kaph" without its tail that we noticed above! Dussaud made this discovery, and with it, the word and the whole inscription takes on new meaning. Instead of 𐤌𐤓𐤍 it is now 𐤕𐤓𐤍 ; and instead of Abiba'al, a citizen of Gebal, we have Abiba'al, the king of Gebal! Clermont-Ganneau's reading was otherwise perfect from the first, but now, with the added help of the Aḥîrâm inscription and the Eliba'al inscription (presently to be discussed), the reconstructions of the mutilated portions are more easily made. But even so, there is not complete agreement yet. We give below the undisputed reading, without the reconstructions before and after and between the lines!

$\text{𐤕𐤓𐤍 | 𐤀𐤁𐤁𐤀𐤕 | 𐤕𐤓𐤍} \text{ (1)}$
 $\text{𐤕𐤓𐤍 | 𐤁𐤓𐤕𐤓𐤍 | 𐤕𐤓𐤍} \text{ (2)}$
 $\text{𐤕𐤓𐤍} \text{ (3)}$

Clermont-Ganneau saw the possibility of two restitutions at the beginning of the inscription: 𐤕(𐤕𐤓' 𐤌𐤕) or 𐤕(𐤌𐤓 𐤌𐤕) . Torrey* thinks that the first one "is extremely probable." It is, in fact, the one adopted by Dussaud** without the 𐤌𐤕 . Montet, on the other hand, has very plausibly suggested that this votive offering begins in the same fashion as the Aḥîrâm and Eliba'al inscriptions. Each names the article (sarcophagus

* JAOS. 45, 1925, p. 278

** Syria, V, 1924, 135-157, espec. 145-7 and Pl. XLII.

or statue), which is followed by the relative ן , and a verb. The verb in the other two cases is פַּעַל , but in this inscription it must end in א . Montet chooses אָשַׁל , and reads the first line: $\text{גְּבַל מֶלֶךְ אֲבִיבַל וְאֶשַׁל}$. The "Gebal" at the end of this line is almost gone, but the reading is sure, both from analogy and the fact that the name occurs in at least two other places.

At the beginning of the second line Dussaud thinks he sees a "shin," and Torrey makes the statement that "the traces of the character ש seem certain." But they are not certain. Clermont-Ganneau had said of this letter: "Je dois dire toutefois que la trace de lettre précédant le nom de Gebal, au début de ce qui reste de la ligne 2, ne semble pas avoir appartenu à un "rech"; c'est un trait oblique (\textbackslash) faisant songer plutôt à un tav du type X ."* Montet objects to Dussaud's reconstruction of ש[לל] , not only on the ground of the "shin," and the lack of sense that it makes, but because "les Sémites aient jamais désigné le Pharaon par le mot 'nogesh'".** Moreover, Dussaud's translation--"Abibaal, king of Gebal, and the suzerain of Gebal in Egypt have offered to Baal, etc."--calls for the co-operation of the Pharaoh in this offering, and to thus inscribe a votive offering is entirely contrary to their habit. As Montet points out, the Egyptian Pharaoh was content always to inscribe his name with the mere addition of such a thing as "beloved by Hathor." If then, the "shin" is

* Recueil, VI, p. 78.
 ** op. cit. p. 325.

uncertain, the "nogesh" unusual, and the inscription in question entirely foreign to Egyptian practise, Dussaud's rendering must be wrong. Depending upon the certainty of the "shin", Torrey has added simply an "aleph" and remarks that "the offering was perhaps made for the benefit of 'the men (?) of Gebal (who are) in Egypt'." This is most unlikely proceeding. Rossini, however, thinks of some representative of Gebal in Egypt, which is not much better.* Montet, on the other hand, believes that Abibaal himself and for himself offered the statue to the goddess of Gebal, but that he used two titles--one of them being his local title and the other his Egyptian title. Dussaud himself mentions the existence of the two titles in Syria VI, p. 105. Montet would, therefore, place at the beginning of line 2 a "samekh," "kaph," and "nun" --"soken."

If something like this be correct, we can now read: "A statue, which Abibaal, king of Gebal, 'soken' of Gebal in Egypt, has offered to Baal (or Baalat)upon Gebal." What lies between the second and third lines is problematical since the whole line along the bottom margin is gone. The existence of such a former line has not, however, been generally appreciated. Clermont-Ganneau thought of this evidently when he noticed that line 3 read from bottom to top. But only two, so far as we know, have attempted a reconstruction on the basis of a long line missing. The first man was M. Noël Aimé-Giron** who gave the following rendering: "A offert

* Syria VI, p. 111, note 4.

** Bulletin d l'Institut francais d'archeologie orientale, XXVI, 1925, pp. 1-13.

(ou analogue) Abibaal roi de Gebal, devenu roi (?) de Gebal en Égypte, à son maître Chechanq parce qu'il l'a établi roi de Gebal." This is, of course, mere guess work. M. Montet's reconstruction, on the contrary, has the distinction of being based on a similar and almost contemporaneous votive offering from the same place. But before we can give his reconstruction intelligently, we must notice the inscription in question.

ELI-BAAL

The inscription appears on the bust of a statue of Osorkon I (924-895), the son and successor of Shishak. This statue was known as early as 1881 when it was discovered by the Egyptologist, Wiedemann (now of the University of Bonn) in the home of the banker, Meuricoffre, at Naples. It was mentioned by Wiedemann in 1884 in his "Aegypt. Geschichte" (p. 553) but no attention was paid to the "Phoenician" characters. He cannot now remember much about them, for he was interested at the time in the cartouche only, which is placed in the middle of the chest--a most unusual place! In 1910 this statue found its way to Paris, and at the beginning of 1925 M. Andre Peytel gave it to the Louvre. There M. Boreux discovered the Phoenician writing and showed it to Dussaud, who gives us the above account in Syria.*

The whole inscription is superior to that of Abibaal, in that it is more complete, and more attention has been given to the arrangement of the lines. There are three lines

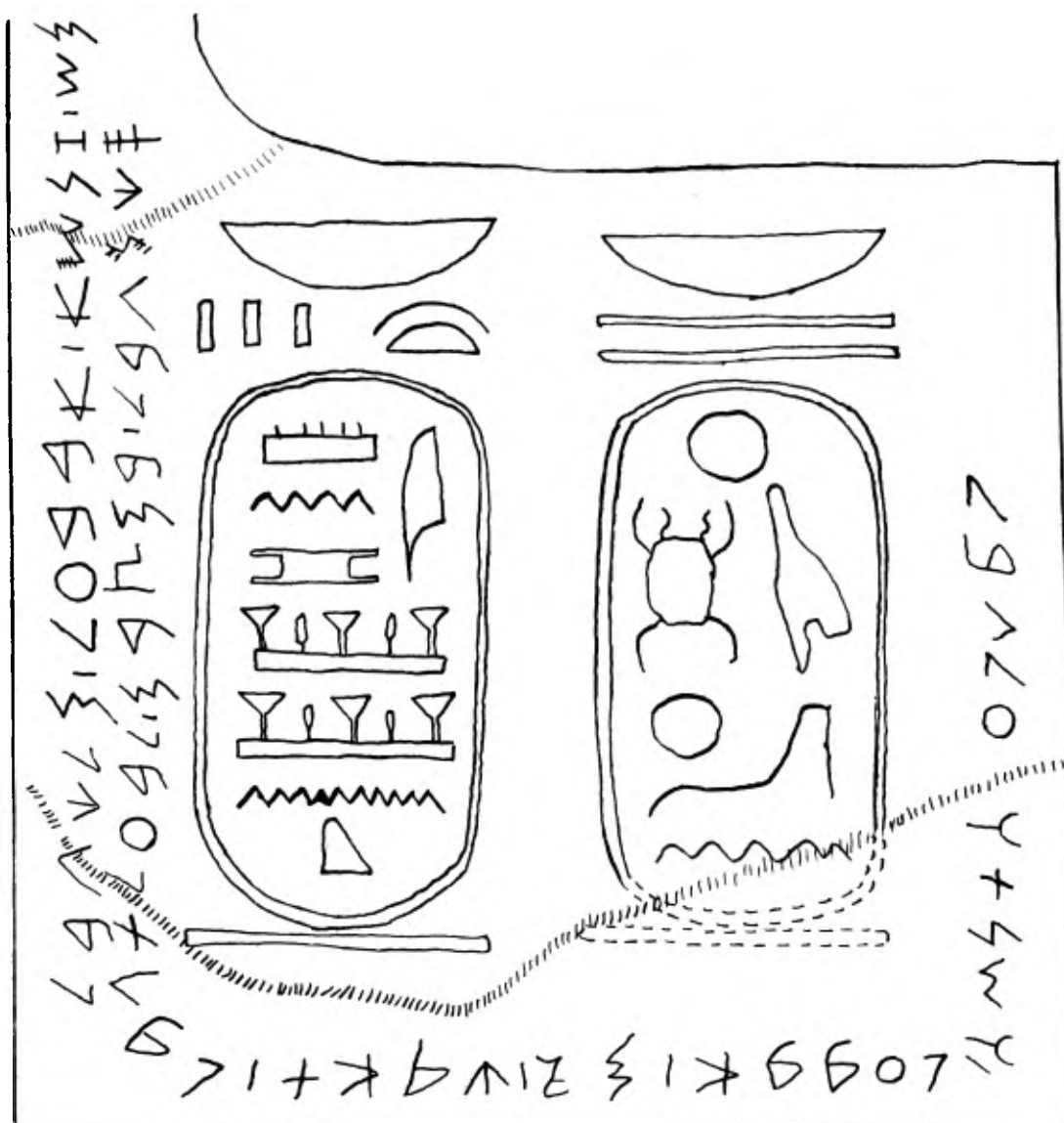
* 1925, pp. 101-117.

Other reconstructions are, of course, possible. For instance, Torrey * suggests that for the end of line one the preposition be given the meaning of "in return for" or "because of" and that the infinitive of לָּבַח with the suffix pronoun be used as in Gen. 4:15, etc. This would give: $\text{בַּיָּחַ לָּבַח בְּגִבְלָתְךָ}$ "In return for the favor shown him by Ba'alath-Gebal." Torrey also objects to Dussaud's translation of לָּבַח , since "we know the Hebrew word only in combination לָּבַח בְּ " by reason of, because of," and the use of such a word here does not seem at all likely." He thinks it is a perfectly regular feminine of לָּבַח , and refers to Ba'alath-Gebal, his divine mistress. He reads it as follows: "This statue was made by Elibaal, king of Gebal, in return for the favor shown him by his Lady, Ba'alath-Gebal. May she prolong the days of Elibaal, and his years, over Gebal!"

On the basis of this inscription, Montet makes his reconstruction of the lost bottom line in the Abibaal inscription. He finds that there is just about enough room for the liturgical formula: "May she prolong the days of Abibaal and his years (of reign) over Gebal!" It will be remembered that the last two words are still preserved.** The Baal needs to be completed to Ba'alath-Gebal and then the above formula added to make complete and good sense. This restitution is not conjecture; it is practically certain. We reproduce Montet's reconstructed text at the top of the next page. It is taken from Plate VII in connection with his article.

* JAOS 46, pp. 237-240.

** See p. 24 of this treatise.



In the two inscriptions it is interesting to note the wise choice of words in one instance at least. Each are statues, but Elibaal is said to have "made" his, while Abibaal simply "offers" his to Baalat-Gebal. These words are borne out by the general appearance of each. The one with the single cartouche placed in the very center of the chest with plenty of room around it for the "phoenician" inscription and the care with which the latter was made suggests that Elibaal had such a statue of his suzerain made in Egypt according to specifications most unusual, and sent to him for an offering to his goddess. Montet suggests that he may have

attached considerable virtue to the mere name of his peer, which was a very common superstition in Egypt and elsewhere.

There is otherwise not much difference between the two. The vocabulary of each is rather poverty-stricken. Whether the two similar prepositions, ^{by} , differ in form is uncertain. The present writer cannot see the "yod" in Elibaal. There is certainly none in Abibaal. There is no reason why the two could not have existed in the tenth century as well as in the thirteenth, or in the time of Kalamu. The Abibaal inscription does not demonstrate its use of the third person singular masculine suffix, but the Elibaal has the "waw" twice. This is opposed to the "hē" of the Ahîrâm inscription and to the "yod" of all other Phoenician texts. The bars of separation between words are not used consistently in the two texts, i.e. Elibaal used the bar between "melek" and "Gebal," while Abibaal did not. It cannot be definitely stated whether the same is true of " 'al Gebal." In such a case we know that the bar was used in Ahîrâm; it may have been used in Elibaal and it may not. In the case of "melek Gebal," Ahîrâm sides with Abibaal and against Elibaal; but in the other case, it is opposed to Abibaal, and may or may not side with Elibaal. So, all that can be determined about this bar of separation is that it was used freely but regularly at Byblus from the 13th to the 9th centuries. The big point of similarity between all three texts is the beginning. That beginning must have a significance. The only significance lies in the "zain." It must be a relative.

PALAEOGRAPHY

The palaeography in all three of these early inscriptions is just about the same. There is the same peculiar "kaph" and the same upright "mem." The "aleph" has undergone two changes: the vertical stroke pierces slightly the vertex of the two diagonal lines, and the diagonals are not so curved. But even in the Ahîrâm inscription the nine different "alephs" are made in at least four different ways. There is one instance of where the diagonals are not curved a bit, while there are four others where only the bottom diagonal line is curved. Comparing the three inscriptions, it may be said that the Ahîrâm text is the most cursive, but even the cursiveness of the latter is not general. Of the six "waws," four only are cursive; the tails of two of them are perfectly straight. Of the twelve "mems," three are sharp-lined. Of the nineteen "lameds," five have a sharp angle. From the eleven "beths" five distinct forms may be picked out! Of the four "yods," the one in the grafitto is not rounded but like that in Elibaal. Cursiveness, after all, is due to several reasons. It would depend upon the material used, and whether the writer chooses one style or another. When stone is used one would want to know if the inscription was made from a manuscript copy or not. On the whole, the grafitto on the wall of the shaft is less cursive than the inscription upon the sarcophagus. It is not likely that a manuscript was used for the former. The "wobbly" form of the "aleph" in one instance on the sarcophagus could well be due to a slip of the engraver's tool. How a man could carve a letter in exactly the same fashion every time

one cannot comprehend. This would be impossible if he were most careful, and that assumes that he was always careful! Even when writing on paper, the forms of our letters differ slightly today, not to take into consideration a nervous hand or an erring mind. How then, Dussaud, or anyone else, can find signs of evolution in certain letters of these three inscriptions is difficult to see. A careful and unprejudiced examination of all the forms in each of the texts compels the present writer to state that, so far as the evidence of these three texts is concerned, no letter but the "aleph" can be said to have "evolved" during those four centuries. And to say that the aleph, beth, gimel, daleth, yod, resh, and taw are in these two tenth century inscriptions transitional between Aḥîrâm and Meša', is to make a highly subjective judgment. Dussaud also claims that the short bar of separation is transitional between the longer bar of Aḥîrâm and the mere dot of Meša'. But after all, there is no separation at all in the Ba'al Lebanon inscription and the Shema' seal from Megiddo, both of which have been supposed to be older than Meša'.

Unless the change in the form of a character is significant and unmistakable and cannot be accounted for otherwise, it seems to the present writer to be extremely hazardous to see in a slight curvature or sharpened angle a sign of "evolution." Evolution does take place, of course, but the significant changes seem to take place quickly, and there are centuries in the history of the alphabet during which there seems to be no evolution taking place at all. The following page will reveal the objective reasons for our scepticism.

Byblus Script				9th and 8th Century Script						
ח	K ³ K ¹ K ¹ K ⁴	K ²	K ³	KK	K	K	K	K	K	KK
כ	g ⁶ g ² g ² g ² g ⁽ⁿ⁾	g ² g ³ g ¹	g ³ g ²	g	g	g	gg	g	g	gg
ל	1 ³ 1 ¹	1 ²	1 ²		1	1	1	11		
ד	Δ ¹ (graffito)		Δ ¹	ΔΔ	Δ	Δ	Δ	Δ	Δ	Δ
נ	≡ ² ≡ ¹ ≡ ¹ ≡ ¹ (gr)				≡	≡	≡	≡≡		
י	Y ¹ Y ²		Y ³		Y		Y	Y	Y	
ס	I ¹ I ¹ I ¹ (gr)		I ¹	I	I		Iz	z	I	
פ	⊠ ¹ ⊠ ¹ ⊠ ¹		⊠ ¹	⊠	⊠	⊠	⊠	⊠⊠	⊠	
צ	⊕ ²			⊕	⊕		⊕		⊕	
ק	z ² z ¹ (gr)		z ^{1m2}	z	z	z	zz	zz	z	z
ג	v ¹	v ¹	v ^{1m2}	y	y	y	y	y	y	
ח	l ¹ l ¹	l ⁶	l ¹⁰	ll	l	l	l	l	l	l
מ	z ¹ z ³	z ³	z ^{1m2}	y	y	y	y	y	y	yy
י	z ¹		z ¹	yy	y	y	y	y	y	
ו	≡ ¹ ≡ ¹			≡	≡	≡	≡≡	≡	≡	
ז	o ⁶	o ³	o ⁵	o	o	o	oo	oo	o	o
ח	)⁵) ²		)¹		7	7	77	7	7	
ט		n ¹		r	n	n	rr	rr	n ²	
פ				p	p		pp	ppp	p	
ק	g ² g ¹	g ¹	g ¹	q	q	q	q	q	q	q
ש	w ¹ w ¹		w ^{1m2}	w	w	w	w	w	w	w
ת	+ ¹ + ²		+ ¹ + ¹ + ¹	+	x	x	xx	x	x	
	Ahîrâm	Abi- ba'al	Eli- ba'al	Baal-Mesa' Leb.	Nora	Zen-	Os- jir- li	Os- tra- ca	Gez- er Cal.	She- ma'

The date of the Eliba'al inscription cannot be earlier than 924 B.C. and may very well be as late^{as} or later than 895 B.C. Meša', of course, dates from the middle of the ninth century. The Shema' seal from Megiddo carries the name of one of the Jeroboams, but on account of its form of "mēm", Dussaud claims that it cannot be Jeroboam I (931-910). He

thinks that it is intermediary between the Byblus script and that of Mesa'. But Jeroboam II reigned after the time of Mesa'--in the first half of the eighth century. If, then, it carries the name of either Jeroboam I or II, it must be dated either in the latter part of the tenth century, or the first part of the eighth century, regardless of its form of "mēm."

But the Ba'al Lebanon text is generally conceded to be older than that of Mesa'--somewhere about 875 B.C.--which would probably put it



Taken from a prospectus of

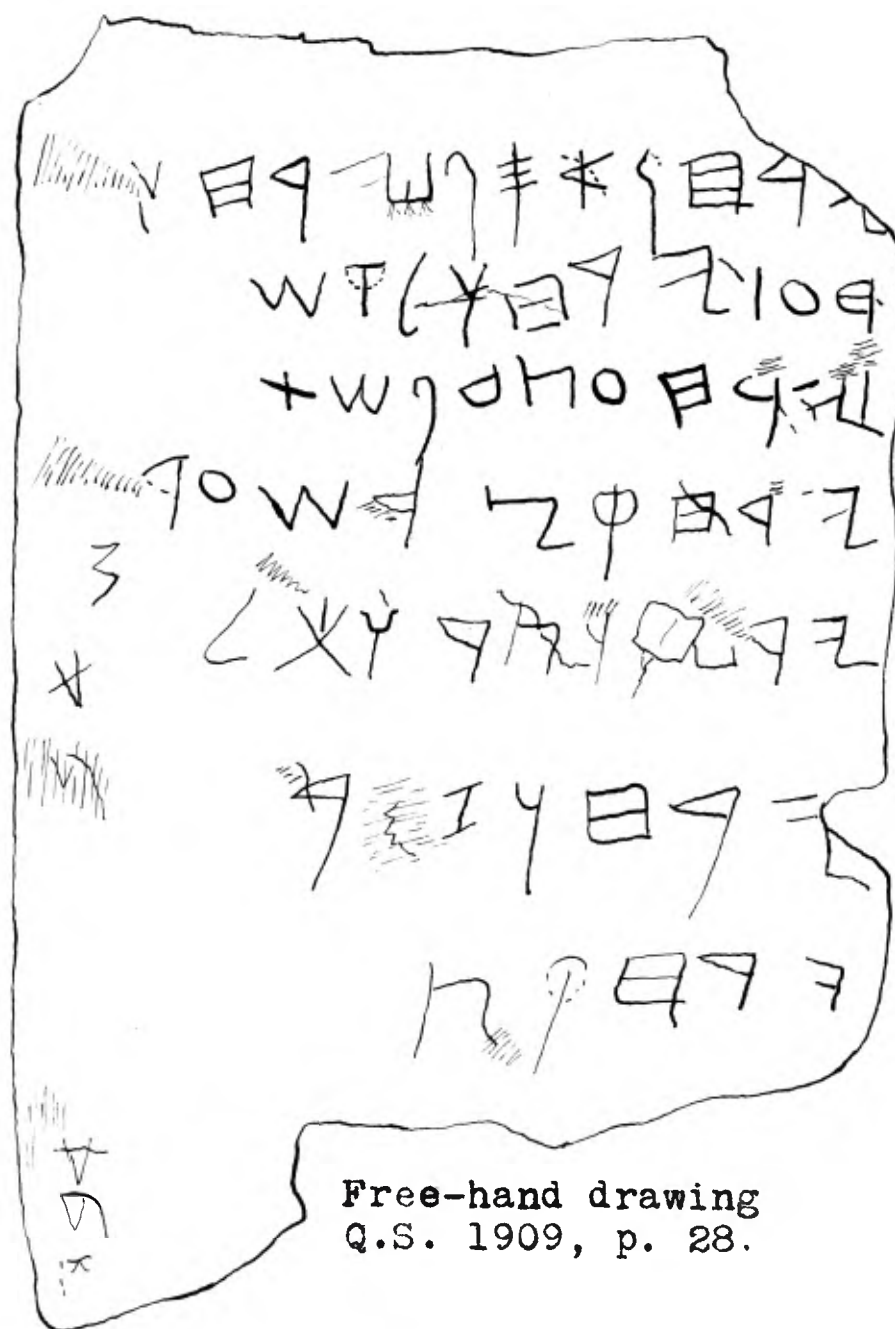
אֱלִיבָאֵל מִכִּיָּא

within as few as twenty years of Elibaal. However, the "mēm" used on this bowl from Cyprus is not vertical but horizontal! On the other hand, the "aleph" of the Ba'al Lebanon inscription comes very close to that used in Abiba'al and Elibaal and there is one instance of similarity to Ahîrâm*, where the diagonals do not go across the vertical stroke at all. Since the "aleph" seems to be our only letter that shows early signs of "evolving," the Ba'al Lebanon inscription must be older than Mesa', and if it is older than Mesa' and so close in time to Elibaal, the "mēm" could not have had time to "evolve."

Moreover, in the sixth line of the so-called Gezer "Calendar" inscription there is a mutilated letter that both

* In an alphabet of Assyrian Lion weights found in Madden's "Coinage" there occurs an "aleph" which is the exact equivalent of that found in Ahîrâm.

Lidzbarski and Gray have taken for a "mēm." If it is, it is vertical! What is the date of this inscription? It has been variously dated all the way from the sixth century to the "oldest Hebrew inscription of the Semitic inscriptions." The inscription uses no signs of separation. Unfortunately, there is no other "mēm" and but one instance of a "kaph." This is not certain but its possibility is significant, for it is not



the "kaph" of either the early Byblus inscriptions or that of Mesa'. It looks like a "taw" with diagonal lines, but in the top angle is a vertical line coming down to meet the

intersection, X . It was first taken for a "taw" by Gray, but he later accepted the "kaph" read by Lizbarski and Ronzevalle. Cut off one of the bottom "legs," and you have something like the "kaph" of the later period; but cut off both bottom "legs," and you have the exact "kaph" of early Byblus! If there is anything in the "evolution" of letters between the periods of Aḥîrâm and Mēsa', this may explain the "kaph." The only two cases of the "aleph", however, are each of the later form and appear on the margin of the little tablet rather than in the body of the inscription. Whether the tablet was a palimpsest is under dispute, but Macalister, who found it, believes not.

The inscriptions of Kalamu and Barrekoub from Zenjirli are dated at the end of the ninth century and in the eighth. The Nora inscription may be from the sixth century but it is archaic in style, and Dussaud puts it in the latter part of the ninth century. The large number of ostraca found at Samaria may date anywhere from 865 to 722 B.C.* They are written with pen and ink and are very cursive in style, so their age cannot well be decided from the form of the letters. It is, in fact, not easy to determine the date of any inscription from isolated instances of letters--either archaic or supposedly late.



Nora--Lidz. Taf. II 3

* They were found in the courtyard of Ahab's palace along with a jar bearing the name of Osorkon II.

We have attempted here to to get before us only a little of the earliest script of "Canaan." It is not our province to go into the history of the alphabet, however interesting that would be. To trace it from the Ahîrâm inscription on down through its various branches--through the Hebrew to its present "square character"--through the later "Phoenician" until it ends in the "Punic,"--through the Arabian to India--through Greece and Rome to Europe and ourselves--would take another volume the size of this, if not several. We shall not, therefore, venture into the seventh century and beyond, to consider even the Siloam inscription, or the archaic characters on the Maccabean, Hasmonean, and Revolutionary coins from the 2nd century B.C. to the 2nd century A.D., or the various seals and weights (although some of them are probably early), or to follow the development of the Aramaic characters as they opened up and became the forebears of the later Hebrew "square" letters, or to examine the later developments in Phoenician inscriptions, such as Tabnith, Eshmun-azer, Marseilles, etc. --to do this is not our thesis! If the reader should like to examine these later scripts, he is referred forthwith to some very excellent alphabetic tables, such as Euting's 139 columns in Chwolson's "Corpus Inscriptionum Hebraicarum."*

* Other tables are: Lidzbarski, Handbuch der Nordsemitischen Epigraphik, Taf. XLIV-XLVI; also at beginning of Gesenius-Kautzsch; Cooke, North Semitic Inscriptions Pl. XII-XIV; in the Palaeographical Society's Vol. of Facsimiles (Oriental Series) Pl. LXXXVII; at the end of Stade's Lehrbuch, Vol. i; Murray's Bible Dict. Pl. XXXVI; Lidz. in Jewish Encyclopedia, Vol. i, p. 449; and Euting's 56 columns in Bickell's Grammar. See also the more recent ones in the articles of Gardiner and Ball to which reference will be made hereafter.

It is significant that during the ninth and eighth centuries the same essential alphabet was diffused over such a wide area. Nothing but trade could have done this. If any other historic element entered in to accomplish this diffusion we know nothing of its character. Soon after the eighth century, the script within the various areas began to develop differences. Could this not have been true in the early history of the alphabet? How widely the alphabet was used in the thirteenth century we have no way of knowing, but the peculiarity of the "Byblus" dialect indicates, by analogy, that the "Byblus" script may also have been peculiar. When the "kaph" of Elibaal is compared with the "kaph" in an inscription from elsewhere but of not much later date, this conclusion is inevitable. We conclude, therefore, that both the language and script of Byblus were peculiar, that the former, at least, was greatly influenced by the Babylonian, and that the latter gradually merged with a monumental script of the eighth and ninth centuries. The peculiarities of the script are undoubtedly "Biblian", but whether the alphabet itself originated in Byblus we cannot say. Only this may be said--that when we discover the alphabet in use at Byblus, it shows signs of a long previous history, probably centuries!

THE SOUTH-SEMITIC AND THE GREEK.

It has been largely assumed that the North-Semitic alphabet is older than either the South-Semitic or the Greek. This is true so far as our actual knowledge goes of the dates of the earliest inscriptions in each of the three groups. The earliest South-Semitic (Minaean) text seems to date from the sixth century B.C.*, while the earliest Greek (that is datable) comes from the seventh.** If, therefore, the Ahîrâm inscription had never been discovered, or if the thirteenth century is not the correct date, even so, the next earliest North-Semitic inscription would thus have the priority in point of antiquity over these other two alphabets. But all three do have a worthy claim to antiquity, and after considering the undated inscriptions in the Greek and the possible antiquity of the undated Minaean inscriptions, it would be really difficult to be dogmatic in one's claims.

All of this being true, one of them must be the mother of the other two, or there is yet undiscovered (or to be mentioned later) an earlier parent of the three. We must then ask ourselves, first of all, whether one of these three alphabets is the actual prototype of the other two.

THE NORTH SEMITIC

In 1901 Lidzbarski, the foremost epigraphist of his day, argued that the North-Semitic alphabet

* Gardiner, JEA. III. p. 4n. says: "The earliest datable Minaean inscription mentions a war between Miṣr (i.e. Egypt) and the Madai (i.e. *Μῆδοι*, Persians), which can only be the invasion of Egypt by Cambyses in 525 B.C."

** An inscr. at Abu Simbel mentions Psammetichus of the beginning of the 6th. cent. This is the first datable one altho those from Thera are probably older. See Taylor, Alph. II, p. 40.

was that prototype.* He regarded the North-Semitic alphabet of the ninth century as the parent of the Sabaean and the Greek. Futhermore, he looked upon the ninth-century alphabet as a comparative infant. Arguing that there was no trace of it in the glosses of the Tell el-Amarna tablets of the approximate period 1400 B.C., he thought that it could not have existed then. "Hätte das Alphabet dort zu der Zeit schon existiert, so wurde man irgendwo eine Spur desselben finden.** He was perfectly sure that "in this country with its dense population and busy trade a form of writing so simple and comfortable in comparison with the cuneiform could hardly have remained in the background." "Daher wird die Existenz des nordsemitischen Alphabetes, wenn überhaupt, auf keinen Fall weit über die Mitte des Zweiten vorchristlichen Jahrtausends hinausgehen."***

The reader must, of course, keep in mind that Lidzbarski wrote the above before the discovery of the Aḥîrâm inscription. If we can depend upon the results of archeology at all, we can now confidently assert that the Phoenician alphabet was in existence in the thirteenth century with every evidence that it had been an alphabet for some time previous. At any rate, it approaches to within two centuries of Lidzbarski's concession--"the middle of the second millenium B.C."

* Ephem. I. pp. 109-136.

** id. p. 110

*** id. p. 111. Kautzsch (Gesenius's Hebrew Grammar, 1910, p. 28) is also of this opinion. "It may be taken as proved that it is not earlier (or very little earlier) than the 15th century B.C., since otherwise the el-Amarna tablets would not have been written exclusively in cuneiform." Bevan, "Writing" Ency. Biblica IV, col. 5358 (1903) held the same view.

The eminent epigraphist goes on to remark that a form of writing that is used only by a few and very little by them undergoes very few changes. He points out that during the first five centuries of its history after it was first introduced to the world (meaning the ninth century), it had changed very little. "If, therefore, the alphabet really existed for six hundred years before that (ninth century), then it did not undergo during that time even the small changes which we can trace in it during the following five hundred years."* Lidzbarski wrote these words before he knew anything about the Ahîrâm inscription of the thirteenth century. As to the relative immutability of the alphabet from the ninth to the fourth centuries he knew himself to be correct, but as to its immutability during the four preceding centuries he knew nothing except by assumption. Gardiner** pointed out (also without knowledge of Ahîrâm) that this assumption was most dangerous, but, as it has turned out, Lidzbarski was not far wrong. The alphabet, as we have it, from the 13th to the 4th centuries, is practically the same alphabet. There were changes, but relatively speaking, they were not significant. The most significant are in the Byblus script, which we have already mentioned in the first chapter. And, as we have already mentioned, these really significant changes seem to come quickly. So, while Lidzbarski was fairly correct as to the immutability

* op. cit. p. 111.

** JEA III. p. 3.

of the alphabet both before and after the ninth century, yet it has not turned out in favor of his argument for the comparative "youth" of the alphabet.

We now proceed to an examination of Lidzbarski's method of deriving the South Semitic and the Greek alphabets from his self-appointed North Semitic prototype. He introduces his method by stating: "Now it is apparent that Ξ has a connection with I , and that X and H are connected with Z and even I ; also there is a connection between H and Ξ , but it is difficult to see any connection between X or H and H . In the same way if you want to get the link between H and X you must make a circle to include the North Semitic \otimes . Which writing is then more original?"* To understand the above quotation, one needs to know that Lidzbarski believes that H is an expansion of Ξ ; \oplus of X ; H of I ; V of W .**

Lidzbarski's argument concerns itself largely with the studied symmetry of form to be found in the South Semitic and Greek alphabets over against the absolute lack of such regularity in the North Semitic. He calls attention to the fact that of the twenty-nine characters in the monumental Sabaean writing, no fewer than twenty-two are so placed that you can divide them into two symmetrical halves: in six, $\text{H} \text{Y} \text{P} \text{I} \text{H} \text{H}$, by a vertical cut; in four, $\text{H} \text{H} \text{H} \text{H}$, by a horizontal cut; and in twelve, $\otimes \text{X} \text{H} \text{H} \text{H} \text{H} \text{H} \text{H} \text{H} \text{H} \text{H} \text{H} \text{H}$ by either.

* op. cit. p. 112

** Cf. also his art. "Alphabet", Jewish Ency. I.

The Greek shows the same symmetry of form. Of 24 letters, 22 are capable of the same thing as the Sabaeen. They are Α Β Γ Δ Ε Ι Η Θ Ι Κ Λ Μ Ν Ξ Ο Π Ρ Τ Υ Φ Χ Ψ Ω.

On the other hand, a look at the North Semitic betrays an absolute absence of regularity. Says Lidzbarski, "Hier herrscht die wildeste Regellosigkeit, und selbst bei Zeichen, wo eine ebenmässige Formung nahe lag, z. B. bei כ , Δ , א , hat man es verabsäumt sie auszuführen."*

Several pages are devoted to the exposition of this matter of symmetry. It is maintained that the endeavor after regularity of

* op. cit. p. 113.

Mesa' and Early Seals.	Early Greek (reduced to type)	South-Semitic			
		Sabaeen	Lihyān	Thamūd	Ṣafā
כ	1. Α	𐩦	𐩦 𐩦	𐩦 𐩦	𐩦 𐩦 𐩦
ז	2. ς	𐩧	𐩧 𐩧	𐩧	) ( 𐩧
ח	3. 1 7	𐩨	𐩨	𐩨 𐩨	𐩨 𐩨 𐩨
ט	4. Δ	𐩩	𐩩 𐩩	𐩩 𐩩	𐩩 𐩩 𐩩
	26. √ √	𐩪	𐩪 𐩪	𐩪 𐩪	𐩪 𐩪 𐩪
א	5. א א	𐩫	𐩫 𐩫	𐩫 𐩫	𐩫 𐩫 𐩫
ב	6. β β				
ג	23. γ γ				
ד	24. East } φ	𐩬	𐩬 𐩬	𐩬 𐩬	𐩬 𐩬 𐩬
ה	25. West } φ				
ו	7. ι	𐩭	𐩭	𐩭 𐩭	𐩭 𐩭 𐩭
ז	8. θ	𐩮	𐩮 𐩮	𐩮 𐩮	𐩮 𐩮 𐩮
	25. East } X				
	24. West } X				
ח	9. ϑ	𐩯	𐩯	𐩯 𐩯	𐩯 𐩯 𐩯
ט	10. ρ	𐩰	𐩰	𐩰	𐩰
י	11. σ	𐩱	𐩱 𐩱	𐩱 𐩱	𐩱 𐩱 𐩱
כ	12. τ	𐩲	𐩲 𐩲	𐩲 𐩲	𐩲 𐩲 𐩲
ל	13. μ μ	𐩳	𐩳 𐩳	𐩳 𐩳	𐩳 𐩳 𐩳
מ	14. ν	𐩴	𐩴 𐩴	𐩴 𐩴	𐩴 𐩴 𐩴
נ	15. ξ ξ	𐩵	𐩵 𐩵	𐩵 𐩵	𐩵 𐩵 𐩵
ס	16. ο	𐩶	𐩶 𐩶	𐩶 𐩶	𐩶 𐩶 𐩶
ע	17. ρ	𐩷	𐩷 𐩷	𐩷 𐩷	𐩷 𐩷 𐩷
פ	18. ρ ρ	𐩸	𐩸	𐩸 𐩸	𐩸 𐩸 𐩸
צ	19. ρ ρ	𐩹	𐩹	𐩹	𐩹
ק	20. ρ) >) >) () (
ר	21. ρ	𐩺	𐩺	𐩺 𐩺	𐩺 𐩺 𐩺
ש	22. +	X	X	X +	X +
		𐩻	𐩻 𐩻	𐩻	𐩻 𐩻 𐩻

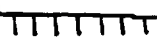
From Gardiner's art. p. 4.
































form is as old as art itself. Even poetry has been dominated by this desire. The cuneiform combinations themselves reveal the same motive. They, so Lidzbarski says, can be divided into halves.

The aesthetic motive has even dominated the direction of writing. The βουστροφηδόν writing, in use only among the symmetrical alphabets, such as the Greek, Sabaean, and Runes, is to be explained primarily on the aesthetic principle.* This principle would also explain the motive that gave different directions to the writing on two Egyptian monuments facing each other. So, according to this line of argument, there was this constant endeavor after symmetry in the two offsprings of the North Semitic alphabet!

The irregular old Semitic 7 tended to become, therefore, the Sabaean O, ◊. In the Greek effort after the same thing, it became first 7 and then Π. The old Semitic 9 became the Greek 4. The North Semitic Z received another diagonal and became the Sabaean X. So the strokes tended to become more and more symmetrical.

There was also the tendency to become "stable." 3, 4, and 7, for instance, lost their stocks and became the later Greek E N M, resting equally on two legs or on a solid base. Lidzbarski says that in the South Semitic also, out of 29 signs no fewer than 21 have a stable form: 𐤀 𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗 𐤘 𐤙 𐤚 𐤛 𐤜 𐤝 𐤞 𐤟 𐤠 𐤡 𐤢 𐤣 𐤤 𐤥 𐤦 𐤧 𐤨 𐤩 𐤪 𐤫 𐤬 𐤭 𐤮 𐤯 𐤰 𐤱 𐤲 𐤳 𐤴 𐤵 𐤶 𐤷 𐤸 𐤹 𐤺 𐤻 𐤼 𐤽 𐤾 𐤿 𐥀 𐥁 𐥂 𐥃 𐥄 𐥅 𐥆 𐥇 𐥈 𐥉 𐥊 𐥋 𐥌 𐥍 𐥎 𐥏 𐥐 𐥑 𐥒 𐥓 𐥔 𐥕 𐥖 𐥗 𐥘 𐥙 𐥚 𐥛 𐥜 𐥝 𐥞 𐥟 𐥠 𐥡 𐥢 𐥣 𐥤 𐥥 𐥦 𐥧 𐥨 𐥩 𐥪 𐥫 𐥬 𐥭 𐥮 𐥯 𐥰 𐥱 𐥲 𐥳 𐥴 𐥵 𐥶 𐥷 𐥸 𐥹 𐥺 𐥻 𐥼 𐥽 𐥾 𐥿 𐦀 𐦁 𐦂 𐦃 𐦄 𐦅 𐦆 𐦇 𐦈 𐦉 𐦊 𐦋 𐦌 𐦍 𐦎 𐦏 𐦐 𐦑 𐦒 𐦓 𐦔 𐦕 𐦖 𐦗 𐦘 𐦙 𐦚 𐦛 𐦜 𐦝 𐦞 𐦟 𐦠 𐦡 𐦢 𐦣 𐦤 𐦥 𐦦 𐦧 𐦨 𐦩 𐦪 𐦫 𐦬 𐦭 𐦮 𐦯 𐦰 𐦱 𐦲 𐦳 𐦴 𐦵 𐦶 𐦷 𐦸 𐦹 𐦺 𐦻 𐦼 𐦽 𐦾 𐦿 𐧀 𐧁 𐧂 𐧃 𐧄 𐧅 𐧆 𐧇 𐧈 𐧉 𐧊 𐧋 𐧌 𐧍 𐧎 𐧏 𐧐 𐧑 𐧒 𐧓 𐧔 𐧕 𐧖 𐧗 𐧘 𐧙 𐧚 𐧛 𐧜 𐧝 𐧞 𐧟 𐧠 𐧡 𐧢 𐧣 𐧤 𐧥 𐧦 𐧧 𐧨 𐧩 𐧪 𐧫 𐧬 𐧭 𐧮 𐧯 𐧰 𐧱 𐧲 𐧳 𐧴 𐧵 𐧶 𐧷 𐧸 𐧹 𐧺 𐧻 𐧼 𐧽 𐧾 𐧿 𐨀 𐨁 𐨂 𐨃 𐨄 𐨅 𐨆 𐨇 𐨈 𐨉 𐨊 𐨋 𐨌 𐨍 𐨎 𐨏 𐨐 𐨑 𐨒 𐨓 𐨔 𐨕 𐨖 𐨗 𐨘 𐨙 𐨚 𐨛 𐨜 𐨝 𐨞 𐨟 𐨠 𐨡 𐨢 𐨣 𐨤 𐨥 𐨦 𐨧 𐨨 𐨩 𐨪 𐨫 𐨬 𐨭 𐨮 𐨯 𐨰 𐨱 𐨲 𐨳 𐨴 𐨵 𐨶 𐨷 𐨸 𐨹 𐨺 𐨻 𐨼 𐨽 𐨾 𐨿 𐩀 𐩁 𐩂 𐩃 𐩄 𐩅 𐩆 𐩇 𐩈 𐩉 𐩊 𐩋 𐩌 𐩍 𐩎 𐩏 𐩐 𐩑 𐩒 𐩓 𐩔 𐩕 𐩖 𐩗 𐩘 𐩙 𐩚 𐩛 𐩜 𐩝 𐩞 𐩟 𐩠 𐩡 𐩢 𐩣 𐩤 𐩥 𐩦 𐩧 𐩨 𐩩 𐩪 𐩫 𐩬 𐩭 𐩮 𐩯 𐩰 𐩱 𐩲 𐩳 𐩴 𐩵 𐩶 𐩷 𐩸 𐩹 𐩺 𐩻 𐩼 𐩽 𐩾 𐩿 𐪀 𐪁 𐪂 𐪃 𐪄 𐪅 𐪆 𐪇 𐪈 𐪉 𐪊 𐪋 𐪌 𐪍 𐪎 𐪏 𐪐 𐪑 𐪒 𐪓 𐪔 𐪕 𐪖 𐪗 𐪘 𐪙 𐪚 𐪛 𐪜 𐪝 𐪞 𐪟 𐪠 𐪡 𐪢 𐪣 𐪤 𐪥 𐪦 𐪧 𐪨 𐪩 𐪪 𐪫 𐪬 𐪭 𐪮 𐪯 𐪰 𐪱 𐪲 𐪳 𐪴 𐪵 𐪶 𐪷 𐪸 𐪹 𐪺 𐪻 𐪼 𐪽 𐪾 𐪿 𐫀 𐫁 𐫂 𐫃 𐫄 𐫅 𐫆 𐫇 𐫈 𐫉 𐫊 𐫋 𐫌 𐫍 𐫎 𐫏 𐫐 𐫑 𐫒 𐫓 𐫔 𐫕 𐫖 𐫗 𐫘 𐫙 𐫚 𐫛 𐫜 𐫝 𐫞 𐫟 𐫠 𐫡 𐫢 𐫣 𐫤 𐫥 𐫦 𐫧 𐫨 𐫩 𐫪 𐫫 𐫬 𐫭 𐫮 𐫯 𐫰 𐫱 𐫲 𐫳 𐫴 𐫵 𐫶 𐫷 𐫸 𐫹 𐫺 𐫻 𐫼 𐫽 𐫾 𐫿 𐬀 𐬁 𐬂 𐬃 𐬄 𐬅 𐬆 𐬇 𐬈 𐬉 𐬊 𐬋 𐬌 𐬍 𐬎 𐬏 𐬐 𐬑 𐬒 𐬓 𐬔 𐬕 𐬖 𐬗 𐬘 𐬙 𐬚 𐬛 𐬜 𐬝 𐬞 𐬟 𐬠 𐬡 𐬢 𐬣 𐬤 𐬥 𐬦 𐬧 𐬨 𐬩 𐬪 𐬫 𐬬 𐬭 𐬮 𐬯 𐬰 𐬱 𐬲 𐬳 𐬴 𐬵 𐬶 𐬷 𐬸 𐬹 𐬺 𐬻 𐬼 𐬽 𐬾 𐬿 𐭀 𐭁 𐭂 𐭃 𐭄 𐭅 𐭆 𐭇 𐭈 𐭉 𐭊 𐭋 𐭌 𐭍 𐭎 𐭏 𐭐 𐭑 𐭒 𐭓 𐭔 𐭕 𐭖 𐭗 𐭘 𐭙 𐭚 𐭛 𐭜 𐭝 𐭞 𐭟 𐭠 𐭡 𐭢 𐭣 𐭤 𐭥 𐭦 𐭧 𐭨 𐭩 𐭪 𐭫 𐭬 𐭭 𐭮 𐭯 𐭰 𐭱 𐭲 𐭳 𐭴 𐭵 𐭶 𐭷 𐭸 𐭹 𐭺 𐭻 𐭼 𐭽 𐭾 𐭿 𐮀 𐮁 𐮂 𐮃 𐮄 𐮅 𐮆 𐮇 𐮈 𐮉 𐮊 𐮋 𐮌 𐮍 𐮎 𐮏 𐮐 𐮑 𐮒 𐮓 𐮔 𐮕 𐮖 𐮗 𐮘 𐮙 𐮚 𐮛 𐮜 𐮝 𐮞 𐮟 𐮠 𐮡 𐮢 𐮣 𐮤 𐮥 𐮦 𐮧 𐮨 𐮩 𐮪 𐮫 𐮬 𐮭 𐮮 𐮯 𐮰 𐮱 𐮲 𐮳 𐮴 𐮵 𐮶 𐮷 𐮸 𐮹 𐮺 𐮻 𐮼 𐮽 𐮾 𐮿 𐯀 𐯁 𐯂 𐯃 𐯄 𐯅 𐯆 𐯇 𐯈 𐯉 𐯊 𐯋 𐯌 𐯍 𐯎 𐯏 𐯐 𐯑 𐯒 𐯓 𐯔 𐯕 𐯖 𐯗 𐯘 𐯙 𐯚 𐯛 𐯜 𐯝 𐯞 𐯟 𐯠 𐯡 𐯢 𐯣 𐯤 𐯥 𐯦 𐯧 𐯨 𐯩 𐯪 𐯫 𐯬 𐯭 𐯮 𐯯 𐯰 𐯱 𐯲 𐯳 𐯴 𐯵 𐯶 𐯷 𐯸 𐯹 𐯺 𐯻 𐯼 𐯽 𐯾 𐯿 𐰀 𐰁 𐰂 𐰃 𐰄 𐰅 𐰆 𐰇 𐰈 𐰉 𐰊 𐰋 𐰌 𐰍 𐰎 𐰏 𐰐 𐰑 𐰒 𐰓 𐰔 𐰕 𐰖 𐰗 𐰘 𐰙 𐰚 𐰛 𐰜 𐰝 𐰞 𐰟 𐰠 𐰡 𐰢 𐰣 𐰤 𐰥 𐰦 𐰧 𐰨 𐰩 𐰪 𐰫 𐰬 𐰭 𐰮 𐰯 𐰰 𐰱 𐰲 𐰳 𐰴 𐰵 𐰶 𐰷 𐰸 𐰹 𐰺 𐰻 𐰼 𐰽 𐰾 𐰿 𐱀 𐱁 𐱂 𐱃 𐱄 𐱅 𐱆 𐱇 𐱈 𐱉 𐱊 𐱋 𐱌 𐱍 𐱎 𐱏 𐱐 𐱑 𐱒 𐱓 𐱔 𐱕 𐱖 𐱗 𐱘 𐱙 𐱚 𐱛 𐱜 𐱝 𐱞 𐱟 𐱠 𐱡 𐱢 𐱣 𐱤 𐱥 𐱦 𐱧 𐱨 𐱩 𐱪 𐱫 𐱬 𐱭 𐱮 𐱯 𐱰 𐱱 𐱲 𐱳 𐱴 𐱵 𐱶 𐱷 𐱸 𐱹 𐱺 𐱻 𐱼 𐱽 𐱾 𐱿 𐲀 𐲁 𐲂 𐲃 𐲄 𐲅 𐲆 𐲇 𐲈 𐲉 𐲊 𐲋 𐲌 𐲍 𐲎 𐲏 𐲐 𐲑 𐲒 𐲓 𐲔 𐲕 𐲖 𐲗 𐲘 𐲙 𐲚 𐲛 𐲜 𐲝 𐲞 𐲟 𐲠 𐲡 𐲢 𐲣 𐲤 𐲥 𐲦 𐲧 𐲨 𐲩 𐲪 𐲫 𐲬 𐲭 𐲮 𐲯 𐲰 𐲱 𐲲 𐲳 𐲴 𐲵 𐲶 𐲷 𐲸 𐲹 𐲺 𐲻 𐲼 𐲽 𐲾 𐲿 𐳀 𐳁 𐳂 𐳃 𐳄 𐳅 𐳆 𐳇 𐳈 𐳉 𐳊 𐳋 𐳌 𐳍 𐳎 𐳏 𐳐 𐳑 𐳒 𐳓 𐳔 𐳕 𐳖 𐳗 𐳘 𐳙 𐳚 𐳛 𐳜 𐳝 𐳞 𐳟 𐳠 𐳡 𐳢 𐳣 𐳤 𐳥 𐳦 𐳧 𐳨 𐳩 𐳪 𐳫 𐳬 𐳭 𐳮 𐳯 𐳰 𐳱 𐳲 𐳳 𐳴 𐳵 𐳶 𐳷 𐳸 𐳹 𐳺 𐳻 𐳼 𐳽 𐳾 𐳿 𐴀 𐴁 𐴂 𐴃 𐴄 𐴅 𐴆 𐴇 𐴈 𐴉 𐴊 𐴋 𐴌 𐴍 𐴎 𐴏 𐴐 𐴑 𐴒 𐴓 𐴔 𐴕 𐴖 𐴗 𐴘 𐴙 𐴚 𐴛 𐴜 𐴝 𐴞 𐴟 𐴠 𐴡 𐴢 𐴣 𐴤 𐴥 𐴦 𐴧 𐴨 𐴩 𐴪 𐴫 𐴬 𐴭 𐴮 𐴯 𐴰 𐴱 𐴲 𐴳 𐴴 𐴵 𐴶 𐴷 𐴸 𐴹 𐴺 𐴻 𐴼 𐴽 𐴾 𐴿 𐵀 𐵁 𐵂 𐵃 𐵄 𐵅 𐵆 𐵇 𐵈 𐵉 𐵊 𐵋 𐵌 𐵍 𐵎 𐵏 𐵐 𐵑 𐵒 𐵓 𐵔 𐵕 𐵖 𐵗 𐵘 𐵙 𐵚 𐵛 𐵜 𐵝 𐵞 𐵟 𐵠 𐵡 𐵢 𐵣 𐵤 𐵥 𐵦 𐵧 𐵨 𐵩 𐵪 𐵫 𐵬 𐵭 𐵮 𐵯 𐵰 𐵱 𐵲 𐵳 𐵴 𐵵 𐵶 𐵷 𐵸 𐵹 𐵺 𐵻 𐵼 𐵽 𐵾 𐵿 𐶀 𐶁 𐶂 𐶃 𐶄 𐶅 𐶆 𐶇 𐶈 𐶉 𐶊 𐶋 𐶌 𐶍 𐶎 𐶏 𐶐 𐶑 𐶒 𐶓 𐶔 𐶕 𐶖 𐶗 𐶘 𐶙 𐶚 𐶛 𐶜 𐶝 𐶞 𐶟 𐶠 𐶡 𐶢 𐶣 𐶤 𐶥 𐶦 𐶧 𐶨 𐶩 𐶪 𐶫 𐶬 𐶭 𐶮 𐶯 𐶰 𐶱 𐶲 𐶳 𐶴 𐶵 𐶶 𐶷 𐶸 𐶹 𐶺 𐶻 𐶼 𐶽 𐶾 𐶿 𐷀 𐷁 𐷂 𐷃 𐷄 𐷅 𐷆 𐷇 𐷈 𐷉 𐷊 𐷋 𐷌 𐷍 𐷎 𐷏 𐷐 𐷑 𐷒 𐷓 𐷔 𐷕 𐷖 𐷗 𐷘 𐷙 𐷚 𐷛 𐷜 𐷝 𐷞 𐷟 𐷠 𐷡 𐷢 𐷣 𐷤 𐷥 𐷦 𐷧 𐷨 𐷩 𐷪 𐷫 𐷬 𐷭 𐷮 𐷯 𐷰 𐷱 𐷲 𐷳 𐷴 𐷵 𐷶 𐷷 𐷸 𐷹 𐷺 𐷻 𐷼 𐷽 𐷾 𐷿 𐸀 𐸁 𐸂 𐸃 𐸄 𐸅 𐸆 𐸇 𐸈 𐸉 𐸊 𐸋 𐸌 𐸍 𐸎 𐸏 𐸐 𐸑 𐸒 𐸓 𐸔 𐸕 𐸖 𐸗 𐸘 𐸙 𐸚 𐸛 𐸜 𐸝 𐸞 𐸟 𐸠 𐸡 𐸢 𐸣 𐸤 𐸥 𐸦 𐸧 𐸨 𐸩 𐸪 𐸫 𐸬 𐸭 𐸮 𐸯 𐸰 𐸱 𐸲 𐸳 𐸴 𐸵 𐸶 𐸷 𐸸 𐸹 𐸺 𐸻 𐸼 𐸽 𐸾 𐸿 𐹀 𐹁 𐹂 𐹃 𐹄 𐹅 𐹆 𐹇 𐹈 𐹉 𐹊 𐹋 𐹌 𐹍 𐹎 𐹏 𐹐 𐹑 𐹒 𐹓 𐹔 𐹕 𐹖 𐹗 𐹘 𐹙 𐹚 𐹛 𐹜 𐹝 𐹞 𐹟 𐹠 𐹡 𐹢 𐹣 𐹤 𐹥 𐹦 𐹧 𐹨 𐹩 𐹪 𐹫 𐹬 𐹭 𐹮 𐹯 𐹰 𐹱 𐹲 𐹳 𐹴 𐹵 𐹶 𐹷 𐹸 𐹹 𐹺 𐹻 𐹼 𐹽 𐹾 𐹿 𐺀 𐺁 𐺂 𐺃 𐺄 𐺅 𐺆 𐺇 𐺈 𐺉 𐺊 𐺋 𐺌 𐺍 𐺎 𐺏 𐺐 𐺑 𐺒 𐺓 𐺔 𐺕 𐺖 𐺗 𐺘 𐺙 𐺚 𐺛 𐺜 𐺝 𐺞 𐺟 𐺠 𐺡 𐺢 𐺣 𐺤 𐺥 𐺦 𐺧 𐺨 𐺩 𐺪 𐺫 𐺬 𐺭 𐺮 𐺯 𐺰 𐺱 𐺲 𐺳 𐺴 𐺵 𐺶 𐺷 𐺸 𐺹 𐺺 𐺻 𐺼 𐺽 𐺾 𐺿 𐻀 𐻁 𐻂 𐻃 𐻄 𐻅 𐻆 𐻇 𐻈 𐻉 𐻊 𐻋 𐻌 𐻍 𐻎 𐻏 𐻐 𐻑 𐻒 𐻓 𐻔 𐻕 𐻖 𐻗 𐻘 𐻙 𐻚 𐻛 𐻜 𐻝 𐻞 𐻟 𐻠 𐻡 𐻢 𐻣 𐻤 𐻥 𐻦 𐻧 𐻨 𐻩 𐻪 𐻫 𐻬 𐻭 𐻮 𐻯 𐻰 𐻱 𐻲 𐻳 𐻴 𐻵 𐻶 𐻷 𐻸 𐻹 𐻺 𐻻 𐻼 𐻽 𐻾 𐻿 𐼀 𐼁 𐼂 𐼃 𐼄 𐼅 𐼆 𐼇 𐼈 𐼉 𐼊 𐼋 𐼌 𐼍 𐼎 𐼏 𐼐 𐼑 𐼒 𐼓 𐼔 𐼕 𐼖 𐼗 𐼘 𐼙 𐼚 𐼛 𐼜 𐼝 𐼞 𐼟 𐼠 𐼡 𐼢 𐼣 𐼤 𐼥 𐼦 𐼧 𐼨 𐼩 𐼪 𐼫 𐼬 𐼭 𐼮 𐼯 𐼰 𐼱 𐼲 𐼳 𐼴 𐼵 𐼶 𐼷 𐼸 𐼹 𐼺 𐼻 𐼼 𐼽 𐼾 𐼿 𐽀 𐽁 𐽂 𐽃 𐽄 𐽅 𐽆 𐽇 𐽈 𐽉 𐽊 𐽋 𐽌 𐽍 𐽎 𐽏 𐽐 𐽑 𐽒 𐽓 𐽔 𐽕 𐽖 𐽗 𐽘 𐽙 𐽚 𐽛 𐽜 𐽝 𐽞 𐽟 𐽠 𐽡 𐽢 𐽣 𐽤 𐽥 𐽦 𐽧 𐽨 𐽩 𐽪 𐽫 𐽬 𐽭 𐽮 𐽯 𐽰 𐽱 𐽲 𐽳 𐽴 𐽵 𐽶 𐽷 𐽸 𐽹 𐽺 𐽻 𐽼 𐽽 𐽾 𐽿 𐾀 𐾁 𐾂 𐾃 𐾄 𐾅 𐾆 𐾇 𐾈 𐾉 𐾊 𐾋 𐾌 𐾍 𐾎 𐾏 𐾐 𐾑 𐾒 𐾓 𐾔 𐾕 𐾖 𐾗 𐾘 𐾙 𐾚 𐾛 𐾜 𐾝 𐾞 𐾟 𐾠 𐾡 𐾢 𐾣 𐾤 𐾥 𐾦 𐾧 𐾨 𐾩 𐾪 𐾫 𐾬 𐾭 𐾮 𐾯 𐾰 𐾱 𐾲 𐾳 𐾴 𐾵 𐾶 𐾷 𐾸 𐾹 𐾺 𐾻 𐾼 𐾽 𐾾 𐾿 𐿀 𐿁 𐿂 𐿃 𐿄 𐿅 𐿆 𐿇 𐿈 𐿉 𐿊 𐿋 𐿌 𐿍 𐿎 𐿏 𐿐 𐿑 𐿒 𐿓 𐿔 𐿕 𐿖 𐿗 𐿘 𐿙 𐿚 𐿛 𐿜 𐿝 𐿞 𐿟 𐿠 𐿡 𐿢 𐿣 𐿤 𐿥 𐿦 𐿧 𐿨 𐿩 𐿪 𐿫 𐿬 𐿭 𐿮 𐿯 𐿰 𐿱 𐿲 𐿳 𐿴 𐿵 𐿶 𐿷 𐿸 𐿹 𐿺 𐿻 𐿼 𐿽 𐿾 𐿿 𐻀 𐻁 𐻂 𐻃 𐻄 𐻅 𐻆 𐻇 𐻈 𐻉 𐻊 𐻋 𐻌 𐻍 𐻎 𐻏 𐻐 𐻑 𐻒 𐻓 𐻔 𐻕 𐻖 𐻗 𐻘 𐻙 𐻚 𐻛 𐻜 𐻝 𐻞 𐻟 𐻠 𐻡 𐻢 𐻣 𐻤 𐻥 𐻦 𐻧 𐻨 𐻩 𐻪 𐻫 𐻬 𐻭 𐻮 𐻯 𐻰 𐻱 𐻲 𐻳 𐻴 𐻵 𐻶 𐻷 𐻸 𐻹 𐻺 𐻻 𐻼 𐻽 𐻾 𐻿 𐼀 𐼁 𐼂 𐼃 𐼄 𐼅 𐼆 𐼇 𐼈 𐼉 𐼊 𐼋 𐼌 𐼍 𐼎 𐼏 𐼐 𐼑 𐼒 𐼓 𐼔 𐼕 𐼖 𐼗 𐼘 𐼙 𐼚 𐼛 𐼜 𐼝 𐼞 𐼟 𐼠 𐼡 𐼢 𐼣 𐼤 𐼥 𐼦 𐼧 𐼨 𐼩 𐼪 𐼫 𐼬 𐼭 𐼮 𐼯 𐼰 𐼱 𐼲 𐼳 𐼴 𐼵 𐼶 𐼷 𐼸 𐼹 𐼺 𐼻 𐼼 𐼽 𐼾 𐼿 𐽀 𐽁 𐽂 𐽃 𐽄 𐽅 𐽆 𐽇 𐽈 𐽉 𐽊 𐽋 𐽌 𐽍 𐽎 𐽏 𐽐 𐽑 𐽒 𐽓 𐽔 𐽕 𐽖 𐽗 𐽘 𐽙 𐽚 𐽛 𐽜 𐽝 𐽞 𐽟 𐽠 𐽡 𐽢 𐽣 𐽤 𐽥 𐽦 𐽧 𐽨 𐽩 𐽪 𐽫 𐽬 𐽭 𐽮 𐽯 𐽰 𐽱 𐽲 𐽳 𐽴 𐽵 𐽶 𐽷 𐽸 𐽹 𐽺 𐽻 𐽼 𐽽 𐽾 𐽿 𐾀 𐾁 𐾂 𐾃 𐾄 𐾅 𐾆 𐾇 𐾈 𐾉 𐾊 𐾋 𐾌 𐾍 𐾎 𐾏 𐾐 𐾑 𐾒 𐾓 𐾔 𐾕 𐾖 𐾗 𐾘 𐾙 𐾚 𐾛 𐾜 𐾝 𐾞 𐾟 𐾠 𐾡 𐾢 𐾣 𐾤 𐾥 𐾦 𐾧 𐾨 𐾩 𐾪 𐾫 𐾬 𐾭 𐾮 𐾯 𐾰 𐾱 𐾲 𐾳 𐾴 𐾵 𐾶 𐾷 𐾸 𐾹 𐾺 𐾻 𐾼 𐾽 𐾾 𐾿 𐿀 𐿁 𐿂 𐿃 𐿄 𐿅 𐿆 𐿇 𐿈 𐿉 𐿊 𐿋 𐿌 𐿍 𐿎 𐿏 𐿐 𐿑 𐿒 𐿓 𐿔 𐿕 𐿖 𐿗 𐿘 𐿙 𐿚 𐿛 𐿜 𐿝 𐿞 𐿟 𐿠 𐿡 𐿢 𐿣 𐿤 𐿥 𐿦 𐿧 𐿨 𐿩 𐿪 𐿫 𐿬 𐿭 𐿮 𐿯 𐿰 𐿱 𐿲 𐿳 𐿴 𐿵 𐿶 𐿷 𐿸 𐿹 𐿺 𐿻 𐿼 𐿽 𐿾 𐿿 𐻀 𐻁 𐻂 𐻃 𐻄 𐻅 𐻆 𐻇 𐻈 𐻉 𐻊 𐻋 𐻌 𐻍 𐻎 𐻏 𐻐 𐻑 𐻒 𐻓 𐻔 𐻕 𐻖 𐻗 𐻘 𐻙 𐻚 𐻛 𐻜 𐻝 𐻞 𐻟 𐻠 𐻡 𐻢 𐻣 𐻤 𐻥 𐻦 𐻧 𐻨 𐻩 𐻪 𐻫 𐻬 𐻭 𐻮 𐻯 𐻰 𐻱 𐻲 𐻳 𐻴 𐻵 𐻶 𐻷 𐻸 𐻹 𐻺 𐻻 𐻼 𐻽 𐻾 𐻿 𐼀 𐼁 𐼂 𐼃 𐼄 𐼅 𐼆 𐼇 𐼈 𐼉 𐼊 𐼋 𐼌 𐼍 𐼎 𐼏 𐼐 𐼑 𐼒 𐼓 𐼔 𐼕 𐼖 𐼗 𐼘 𐼙 𐼚 𐼛 𐼜 𐼝 𐼞 𐼟 𐼠 𐼡 𐼢 𐼣 𐼤 𐼥 𐼦 𐼧 𐼨 𐼩 𐼪 𐼫 𐼬 𐼭 𐼮 𐼯 𐼰 𐼱 𐼲 𐼳 𐼴 𐼵 𐼶 𐼷 𐼸 𐼹 𐼺 𐼻 𐼼 𐼽 𐼾 𐼿 𐽀 𐽁 𐽂 𐽃 𐽄 𐽅 𐽆 𐽇 𐽈 𐽉 𐽊 𐽋 𐽌 𐽍 𐽎 𐽏 𐽐 𐽑 𐽒 𐽓 𐽔 𐽕 𐽖 𐽗 𐽘 𐽙 𐽚 𐽛 𐽜 𐽝 𐽞 𐽟 𐽠 𐽡 𐽢 𐽣 𐽤 𐽥 𐽦 𐽧 𐽨 𐽩 𐽪 𐽫 𐽬 𐽭 𐽮 𐽯 𐽰 𐽱 𐽲 𐽳 𐽴 𐽵 𐽶 𐽷 𐽸 𐽹 𐽺 𐽻 𐽼 𐽽 𐽾 𐽿 𐾀 𐾁 𐾂 𐾃 𐾄 𐾅 𐾆 𐾇 𐾈 𐾉 𐾊 𐾋 𐾌 𐾍 𐾎 𐾏 𐾐 𐾑 𐾒 𐾓 𐾔 𐾕 𐾖 𐾗 𐾘 𐾙 𐾚 𐾛 𐾜 𐾝 𐾞 𐾟 𐾠 𐾡 𐾢 𐾣 𐾤 𐾥 𐾦 𐾧 𐾨 𐾩 𐾪 𐾫 𐾬 𐾭 𐾮 𐾯 𐾰 𐾱 𐾲 𐾳 𐾴 𐾵 𐾶 𐾷 𐾸 𐾹 𐾺 𐾻 𐾼 𐾽 𐾾 𐾿 𐿀 𐿁 𐿂 𐿃 𐿄 𐿅 𐿆 𐿇 𐿈 𐿉 𐿊 𐿋 𐿌 𐿍

is not mere chance. Eighteen of the signs stand on perpendicular limbs, and three, in addition, are finished off with straight lines. Lidzbarski adds further: "Die Sabäer wiederum haben ihre Schrift so geformt, dass sie wie von Säulen getragene Gerüste aussieht. Die Kalligraphie wird von der Ornamentik und diese auch von architektonischen Motiven beeinflusst."* He claims that the motive  is very popular, and even refers the names of the South Arabic letters to it.**

All of this seems to be more or less true, and granted, but where scholars disagree with our authority is in his method of deriving the South Semitic forms from the North Semitic:  comes from  :  was, like the Greek, at first on end, thus , and became  in order to get perpendicular supports. The Sabaean  is not symmetrical, but the Liḥyân  is.  comes from  :  first became  which was turned around , and put on two perpendicular supports , and became .  comes from  :  got twisted around , to which a second horizontal bar was added for symmetrical purposes, simply because there were two perpendicular lines.  comes from  : Two possible developments are offered: (1) The Liḥyânic intermediate  becomes , which, however, was identical with the  = , so was turned upside down. (2)  was turned around , which soon received a "pillar" thus , or as cuneiform strokes lose their original position, so the middle perpendicular dropped down, thus .  comes from  :  was

* op. cit. p. 118.

** id. p. 119.

turned around originally, thus 𐩧𐩨 . An "important" intermediate letter in the Liḥyân is 𐩧𐩨 , which became 𐩧𐩨 . "Das emphatische 𐩧𐩨 kann aus 𐩧𐩨 oder auch aus 𐩧𐩨 gebildet sein."

We need not go further. The reader may follow our friend, if he cares to, in these rather ingenious but somewhat violent methods. Prätorius takes exception to them at almost every point.* Concerning the 𐩧𐩨 , he thinks that Lidzbarski is particularly weak in assuming that the Liḥyân 𐩧𐩨 is symmetrical. If the top was \wedge how did it become \vee , and is it any more symmetrical? And how did the \wedge become the unsymmetrical 𐩧𐩨 in the Sabaean 𐩧𐩨 ? Prätorius believes also that Lidzbarski's comparison with the Greek is very doubtful. An examination of the oldest Greek in the last part of this chapter will reveal 𐩧𐩨 quite as often on one leg, thus 𐩧𐩨 or 𐩧𐩨 .

Prätorius, on the other hand, believes that 𐩧𐩨 became 𐩧𐩨 , which is the actual or original Safâ form. "Den Ursprung der Form vergessend, setzte man dann die beiden Zacken auch an verschiedene Seiten des Schaftes an: 𐩧𐩨 , 𐩧𐩨 ; " and then the ends of the shaft itself were bent round to get the less usual and secondary form 𐩧𐩨 . He considers the Arabic prototype to be 𐩧𐩨 and that the Liḥyân has simply lost its shaft thus 𐩧𐩨 ; while the Sabaean 𐩧𐩨 is due to simplification for cursive purposes.

As to the 𐩧𐩨 , he believed (in 1904) that it simply gave up the left stroke and the lower cross bar, thus: 𐩧𐩨 . Then it became 𐩧𐩨 which in "ornamental" shape developed into

* ZDMG. 58. 1904. pp. 715-26.

ם ם , ם ם . But in his later article* (1909) he states that the left-hand perpendicular stroke which is absent in the South Semitic never was present there! In other words, the form ם was taken over in the South Semitic not as ם but ם , and quite independent of whether ם or ם is the original South Semitic form. "Wozu wäre beim südsemitischen ם der differenzierende Schacht auch nötig gewesen, da der Buchstabe, von dem differenziert werden sollte (ם), im südsemitischen Alphabet ganz anders aussieht und in das südsemitische Alphabet auch schon von vornherein in ganz anderer Gestalt eingetreten zu sein scheint."** He even goes further and states that this ם , ם , and ם (ם) finds a common origin in the Cypriote syllable ke (khe, ge) ם , ם . "While the form ם , ם , ם , (South-Semitic) which corresponds to the Cypriote ם and Canaanite ם passed into South-Semitic as ם , a form for ם branched off in the direction of the Cypriote form ם and the Canaanite form ם , and even went further."*** Then the perpendicular became more prominent and the horizontal lines less so. The lower horizontal line was dropped and they had the ʕafâ ם , the Liḥyânic ם , and the Sabaean ם .

All of which differs radically from Lidzbarski's explanations quoted above. For the "samech", it will be remembered that he derived the Sabaean ם from the ם thru the Liḥyânic ם . (See p. 47) Prätorius, on the other hand, quotes Müller as saying that all intermediate links between

* ZDMG 63 (1909).

** op. cit. p. 193.

*** id. p. 194.

the North-and South-Semitic forms are entirely wanting, and Müller, moreover, was trying to derive the latter from the former. But Prätorius suggests, of course, that very probably the intermediate links never existed! In other words, the forms for D in the two alphabets were different from the beginning, which may also explain their difference in name. The North Semitic D , F , came from the Cypriote syllable si, while the South Semitic D is identical even in form with the Cypriote sa.

It will be clear to the reader by this time the reason for the divergence of opinion between these two scholars. They are approaching their problem from two angles, each influenced by his original point of view. Lidzbarski is intent on finding similarities and intermediate steps of development between the North and South Semitic alphabets. Prätorius is just as determined to see as little similarity as possible, for to him they bear the relation of cousins rather than mother and child. We shall see clearly his reasons when we come to discuss the Cypriote theory of which he is largely the champion.

For instance, in the D he sees nothing in common between the two alphabets but a "wavy line!" There is no sign of transition between them. They were different from the beginning. Concerning the T the only feature in common that he can detect is the triangle part. The perpendicular line of the South Semitic D looms large in his eyes and has no connection at all with the little cursive mark that sometimes

appears in the North Semitic 4 !

Prätorius undoubtedly refuses to see real resemblances in the interest of his Cyprus theory. And even when he does recognize the possible resemblance, he derives the two from a similar Cypriote syllable. Such is his treatment of \mathfrak{D} derived from \mathfrak{S} pe; and \mathfrak{L} from tu \mathfrak{H} . Lidzbarski says, "The agreements adduced by Prätorius are really made by him, and only in connection with u and w will the unprejudiced eye find any similarity."*

However, we are not here concerned with Pratorius' theory as to the alphabet's origin. We want only his view as to the relations between the alphabets we do know. He sums this up as follows: "Accordingly, we are obliged very seriously to weigh the possibility that the South-Semitic alphabet is descended, not from the Mesha' alphabet or from some only slightly different and slightly older script, but rather from a much older script which must in essentials have exhibited an alphabetic character. On this view, the uniformity which the letters of the South-Semitic alphabet display among themselves, in strong contrast to the wholly different Phoenician alphabet, would find its explanation in the fact that the South-Semitic and the Phoenician alphabets were very ancient bifurcations from a script still plastic and not yet reduced to uniformity. A further inference to be drawn would be this, that very possibly the intermediate stages between the Mesha' alphabet and the South-Semitic may now have completely disappeared!"**

* Ephem. II. p. 372.

** ZDMG. 65. p. 191.



The main statement is unquestionably sound. We believe that it is absolutely impossible to derive the South-Semitic from the North-Semitic directly. The divergences in form are too great. Scholars seem to be almost unanimous in deprecating Lidzbarski's *modus operandi*. Evans says: "His derivations of the South Arabian forms from the Canaanite characters are in many cases only obtained by the most violent and procrustean methods."* Gardiner remarks that "the real answer to Lidzbarski is given by an examination of the methods by which he derives the South-Semitic (Minaeo-Sabæan) letter-forms from the Phoenician."** Dussaud*** also criticises in a general way, but we must do Lidzbarski justice by suggesting that these gentlemen, of course, have axes of their own to grind!

However, Lidzbarski, with all his genius, has not made good his theory; and neither has Prætorius, but he has correctly refuted Lidzbarski. The North-Semitic as we know it is not the direct prototype of the South-Semitic alphabets, as we know them. We must look elsewhere.

Of the twenty-two letters common to both the North- and South-Semitic alphabets, Prætorius maintains that in 16 of them there is more or less uniformity in the four South-Semitic alphabets. Yet the North-Semitic is totally different.**** This would show that the two main branches were "very ancient bifurcations from a script still plastic and not yet reduced to uniformity." Among the six others, א ב ג ד ה ו, he concedes

* Scripta Minoa, I, p. 81 n. 2

** JEA III. p. 3

*** Les Arabes en Syrie, pp. 67-73.

**** Examine table on p. 45.

that there is less uniformity and suggests a possible different origin. The absolutely complete lack of uniformity, on the other hand, among all the other letters which are not found in the North-Semitic, is significant. They may come from phonetic equivalents. Many of their derivations are unknown. For $\dot{\text{S}}$, the Šafâ-Thamûdic $\dot{\text{Y}}$ is uncertain; the Liḥyânic H may have been differentiated from the phonetically allied $\text{H}(\dot{\text{S}})$ which the Sabaean had lost; the Sabaean H may thus have come from the H . For the $\dot{\text{C}}$, the Sabaean C , the Liḥyânic $\dot{\text{X}}$, the Šafâ-Thamûdic X are all dissimilar, and derivations are not known. For U , Sabaean U and Šafâ U are not at all alike. For $\dot{\text{C}}$, the Šafâ Z may be connected with the Thamûdic Z , but they are not at all like the Sabaean Z . The origin of these three cannot be given. For the W , the Šafâ H has a very distant resemblance to the Thamûdic X ; H seems to have some connection with $\text{H}(\dot{\text{S}})$, but X looks like $\text{X}(\text{U})$, and the Sabaean H looks very unlike both letters. W is the only letter that seems to have the same form in all three alphabets. Only in the Liḥyânic is there a difference. $\dot{\text{X}}$ may come from $\text{X}(\text{J})$; otherwise it is unintelligible.

Prätorius concludes these observations by saying:

"The differences of these forms show us that there must have been several South-Semitic alphabets at a time when these additional letters were not in existence. The additional letters developed only after the separation of the South-Semitic alphabets in such a way that the Šafâ and Thamûdic were in considerable touch with each other during the development, (as shown in $\bar{\text{T}} \bar{\text{N}} \bar{\text{Y}} \bar{\text{J}}$). The Sabaean and Liḥyânic alphabets show

connection in \bar{y} and the Ṣafâ-Thamûdic with the Sabaeen only in \bar{y} ."

We are ready to conclude with Gardiner, that in the separate branches of the North and South-Semitic alphabets, there may have been independent but parallel development-- but "if anything is certain, it is that the South-Semitic group of scripts can just as little be descended from the Phoenician alphabet as this, conversely, can be descended from the South-Semitic group." **

THE GREEK ALPHABET

As to the relation of the Greek alphabet to the two branches of the Semitic alphabet, Dussaud has put forth a most unprovable hypothesis. He would derive the other two from the Greek!

He thinks (or rather thought) that once you admit the derivation of the Greek from the Phoenician, as Evans *** and Reinach **** have done, one is compelled to admit the following succession: Phoenician, Greek, Sabaeen. For "en ce qui concerne l'alphabet sabéen, nous avons constaté une plus grande affinité avec les alphabets grec qu' avec le phénicien." *****

* ZDMG. 63. p. 197.

** Hommel's conjecture that the North-Semitic alphabet was derived from the South-Semitic is impossible and has no followers.

*** op. cit. p. 73. "The occurrence in the Greek alphabet of certain forms typologically older than the earliest known examples of the equivalent Phoenician characters tends to show that the alphabet had been introduced into Greece before the beginning of the ninth century B.C."

**** L'Anthropologie, 1902, p. 10: "Les alphabets actuellement en usage chez les peuples civilisés dérivent tous de l'alphabet phénicien: c'est là un fait souvent affirmé et qui n'est pas contestable."

***** Les Arabes, etc. p. 84.

Let us see if he actually has. In the table that he gives, and which we reproduce below, he thinks that it is easily discoverable that "dans plusieurs cas le phenicien ne resont pas les formes sabeennes tandis que le grec archaique possede des formes tres voisines sinon identiques."*

Hebrew	Phoenician	Supposed Intermediate Forms	Greek	Sabaean
א	𐤀	𐤀 𐤀	𐤀	𐤀
ב	𐤁	𐤁 𐤁	𐤁 ~	𐤁
ג	𐤂		𐤂	𐤂
ד	𐤃	𐤃		𐤃
ה	𐤄	𐤄 𐤄	𐤄	𐤄
ו	𐤅		⊙ = ρ	⊙
ז	𐤆	𐤆	𐤆	𐤆
ח	𐤇	𐤇 𐤇	𐤇 𐤇 = 𐤇	𐤇 𐤇
ט	𐤈	𐤈 𐤈	𐤈 𐤈	𐤈
י	𐤉	𐤉 𐤉	𐤉 𐤉 𐤉	𐤉
כ	𐤊		𐤊	𐤊
ל	𐤋		𐤋	𐤋
מ	𐤌		𐤌 (carian)	𐤌
נ	𐤍		𐤍	𐤍
ס	𐤎	𐤎 𐤎	𐤎	𐤎
ע	𐤏		𐤏	𐤏
פ	𐤐	𐤐 𐤐	𐤐	𐤐
צ	𐤑		𐤑	𐤑
ק	𐤒		𐤒	𐤒
ר	𐤓		𐤓	𐤓
ש	𐤔		𐤔	𐤔
ת	𐤕		𐤕	𐤕

From "Les Arabes in Syrie", p.75.

* op. cit. p. 77.

An examination, however, of this table shows only two real cases where the Greek and Sabaeen agree as opposed to the Phoenician. These are the "lamed" 7 and the "šin" 𐤱, which are practically identical in the Greek and Sabaeen. However, the Phoenician 𐤬 and 𐤮 are not much different. On the other hand, a great many of the Greek and Phoenician letter-forms agree over against the Sabaeen, and some are the same in all three. The additional letters of the Greek alphabet X, Φ, and Ψ, moreover, are certainly later additions that came into the Greek (from some source), after they had borrowed the 22 Phoenician letters. They are not found in the Greek inscriptions from the Island of Thera. If Prätorius is right in deriving them from the Ṣafâ*, that would readily account for their closer affinity to the South-Semitic.

We cannot see that Dussaud has in the least made good his claim. But let us continue to follow him. He is not ready to admit that the Phoenician is the oldest alphabet, although he thinks that it is the only other alternative to an Aegean origin.

He states that either the Phoenician alphabet underwent a sudden and rapid deformation as early as the eighth century, in order to evolve the Sabaeen alphabet of which deformation there is not the slightest trace; or the Sabaeen alphabet was derived directly from an archaic Greek alphabet. *Cette seconde hypothèse, qui nous paraît la plus vraisemblable, explique tout naturellement l'identité établie par M.

* ZDMG. 56. (1902) pp. 676-680.

Praetorius entre le phi grec archaïque et le waw sabéen."*

We feel that he is quite justified in saying that "il est difficile de tirer l'alphabet sabéen directement du alphabet phénicien," but it is not apparent that one is shut up to the two alternatives above. The South-Semitic group does not need to be derived from either the Phoenician or the Greek. But that there is a close resemblance between the Phoenician and the Greek, scholars have always noticed. As Gardiner says, there is no use blinking the fact.** The similarity both of forms and of names are all too apparent. Did the Greek come from the Phoenician as scholars, both ancient and modern, have always supposed, or did the Phoenician spring from an Aegean prototype according to Dussaud's tentative hypothesis?***

In order to maintain the latter proposition it is necessary to get rid of the Semitic names that the Greek letters evidently bear. Either they are not of Semitic origin or they were imported long after the forms had come into existence. We must reserve this question for a future chapter. Suffice it now to quote Gardiner, who says that "Dussaud's tentative con-

* Les Arabes, etc. pp. 78-79.

** JEA III. p. 4.

*** Dussaud had said in "Les Civilisations Préhelléniques": "La question principale, qui reste en suspens, est de savoir d'ou est tiré l'alphabet prototype. Il peut être d'origine égéenne, c'est-à-dire qu'il peut avoir été en usage d'abord chez les Egéens. Sinon, il reste vraisemblable que l'alphabet prototype n'est autre que l'alphabet phénicien." pp. 434-435. But the reader will hold in remembrance the later work of Dussaud cited in the first chapter. He seems to have given up much of his hypothesis since the discovery of Aḥîrâm.

jecture that the Phoenician was derived from the Greek must be regarded as pure paradox."* And let us do Dussaud justice by remarking that the only firm conclusion he believes himself to have offered is the Greek origin of the Sabaean alphabet, but, says he, "cela constitue une présomption sérieuse en faveur de l'origine égéenne de l'alphabet."** In other words, he makes the "serious presumption" that the Phoenician letters are derived from the archaic Greek. This we cannot accept.

The old view is probably still safe and sane.*** At some time, probably prior to the tenth century, or to be more exact, about 900 B.C.,**** the "Phoenicians" gave their alphabet to the Greeks. Jensen is undoubtedly correct when he states that "the derivation of the Greek from the old Phoenician is absolutely certain."***** He bases this statement on four facts: (1) The letter-names are practically identical. (2) The names can only be explained from the Phoenician. (3) Their order and use as numerals correspond. (4) Direction of writing corresponds in each. This much is certain.

Whether the "Phoenician" alphabet itself had its origin and incentive in the hieroglyphic or syllabic script of the Aegean basin is quite another problem. That there must be a prototype somewhere is conceded.

* op. cit. p. 4

** Les Arabes, p. 90.

*** See Herodotus V. 58 and other classical writers.

**** Dussaud advocates just this date in Syria V, 1924, p. 156. He states that on account of the form of "aleph" in the Abiba'al inscr., the Greeks could not have borrowed the letter from the Phoenicians before the end of the 10th cent.

***** Geschichte der Schrift, p. 155.

THE NAMES OF THE LETTERS

In considering the origin of the alphabet, only two alternatives present themselves: either two of the alphabets we have been considering sprang from the third, or all three came from a common stock. We may safely conclude that the Greek was borrowed from the North-Semitic, but that neither the North-nor the South-Semitic alphabets has its origin in the other. If then these two alphabets are independent, we must look for a common source--an ancient prototype. But before looking for that prototype, and before considering the various theories of origin, it will be necessary to call in review certain evidence bearing upon the problem. This evidence is found in the names of the letters and in the order of those letters in the alphabet. We will first consider the names.

The names may be divided into three classes: (1) Those that have definite meaning; (2) Those that have a doubtful meaning; (3) Those that have no meaning at all. As to the Semitic meaning of 'alf, bet, delt, wau, yod, mēm, nūn (or nāḥāsh), 'ain, pē, rōsh, shin, and tau, there is little doubt. Most scholars would admit them to mean respectively ox, house, door, hook, hand, water, fish (or serpent), eye, mouth, head, tooth, and cross. Brown, Driver and Briggs give the following meanings:

אָלף	Cattle. (Pr. 14:4; Is. 30:24) Ph. אָלף As. alpu.
בֵּית	House. Ph. בית; Ar. بَيْتٌ; Aram. ܒܝܬ; As. bītu; Sab. בית Eth. ቤት:
דֶּלֶט	Door. As. daltu (m) Gn. 19:10 + 18 t.

- 1] hook, pin or peg. (See Ex. 38:28; 27:10; 26:32; 36:36)
 7] hand. Aram. ܠܝܕ; ܠܡܐ; Ar. ٱيد; Sab. ܬܝ Sam. ܬܝ As. idu.
 ܡܝܢ pl. Waters or water. Aram. ܡܝܢ; ܡܝܢ; As. mû, pl. mē, also māmū; Ar. ٴم; Eth. ማዕ: pl. ማዕ: Sab. ܡܝܢ pl. ܡܝܢ, Min. (ܡܢ) pl. ܡܢ.
 ܦܝܝ fish in N.H.; so Aram. ܦܝܝ; ܦܝܝ; As. nunu.
 ܦܝܝ eye (ancient Sem. word. ✓ unknown) ܦܝܝ As. ênu, enu. Tel. Am. inaya and (appar. Can. gloss) ḥinaya; Ar. عَيْن; Eth. ፬፻፺:
 ܦܝܝ mouth (prob. bilit. [ܦܝܝ, ܦܝܝ]; Ph. ܦܝܝ As. pû; Ar. فَوْه, فَوْه; Eth. ሸፋ; Syr. ܦܝܝ acc. to.
 ܪܝܫ head (common Sem. word; earliest form ra'sš, Ar. رَأْس; Sab. ܪܝܫ; Eth. ረእሽ: Amh. ረእሽ: As. rêšu (rarely râšu); Aram. ܪܝܫ, ܪܝܫ.
 ܨܝܝ tooth, ivory. Ex. 21:24; Dt. 32:24. ✓ ܨܝܝ vb. = whet, sharpen. (cf. Ar. سَنَّ id; Aram. ܨܝܝ, ܨܝܝ sharp, etc. Eth. (ሰረረ:) III 2, ሰረረ: contend; hence ܨܝܝ tooth; N.H. id.; As. šinnu; Ar. سَنَّ; Eth. ሰረረ: Aram. ܨܝܝ, ܨܝܝ.
 ܩܝܝ mark. Cf. NH. ܩܝܝ=BH. ܩܝܝ, ܩܝܝ. See Ez. 9:4,6.
 ܩܝܝ hollow or flat of hand, palm, sole of foot, pan. (N.H. id.; ܩܝܝ; As. kappu, hand, pan, kippatu, hollow; Ar. ܩܝܝ palm, hand). vb. ܩܝܝ = bend, hence bent hand?

There are four other names considered doubtful. They are gaml, zai, lamd, and semk. These are the hypothetical pronunciations of the names deduced by Noldeke.

- ܩܝܝ camel. Cf. ܩܝܝ ܩܝܝ: gammalu.
 ? zai ܩܝܝ olive. cp. ܩܝܝ, ܩܝܝ; ܩܝܝ: Hence Gr. zeta.
lamd ܩܝܝ ox-goad. Ju. 3:31 (acc. to Gardiner)
 ? semk from verb ܩܝܝ lean, rest, support? hence prop?

Then, as a third group, there are five names generally considered without any Semitic meaning at all. As Macalister says: "The tortures of the Inquisition have to be applied

before a meaning can be extracted from them through the Semitic."* They are hē, hēt, tēt, ṣadē, and qof.**

Of the first group, Gardiner thinks he sees a resemblance to the object indicated by the name in ʿain, tau, mēm, alf, wau, bēt, pe, kaf, shin, and delt, in either the Phoenician and Greek, or the South-Semitic forms. But Grimme, on the other hand, can see no pictures at all in the Phoenician known to us.

Lidzbarski, moreover, was led to change certain of the names (accepting the old Phoenician as the prototype), because he did not see in these names a description of what the letter-form seemed to be. For instance, he saw in the form Δ more the appearance of dad, "the female breast", than of delt, "a door," so he deliberately changed delt to dad! In the same way he substituted qeshesh "bow" for qof (which has no meaning); and garzēn "axe" for gaml "camel." Not getting sufficient satisfaction otherwise, he decided to leave the names aside altogether and ask himself, What does Φ look like? He replies, "a bow and arrow." Therefore, its name is $\Pi\omega\pi$! We ourselves experimented with Φ and asked an uninitiated person what he thought it might be, and his answer was, "an umbrella!" Does γ look like a camel, asked Lidzbarski? No, but it does look like an axe or hatchet. And so, by the very nature of his theory, he is compelled to make the names fit the forms in vogue in Syria in 1000 B.C.

In other words, there has been the feeling among

* The Philistines, pp. 129-130.

** See next page for Table of Names.

TABLE OF NAMES.

Nöldeke	Hebrew	Meanings	Greek	Ethiopic	Arabic.
1. 'alf	āleph	ox	alpha	alf (13)	alif (1)
2. bēt	bēth	house	bēta	bēt (9)	bā (2)
3. gaml	gimel	camel?	gamma	gaml (20)	jīm (5)
4. delt	dāleth	door	delta	dant (19)	dāl (8)
5. hē	hē		ei	hōi (1)	hā (26)
6. wau	wāw	hook, nail	vau(digamma)	wawē (15)	wāw (27)
7. zai	zayin		zēta "olive?"	zai (17)	zā (11)
8. hēt	hēth		(h)ēta	haut (3)	ha (6)
9. tēt	tēth		thēta	ṭait (21)	ṭa (16)
10. yōd	yōd	hand	iōta	yaman"right hand"(18)	yā(22)
11. kaf	kaph	bent hand	kappa	kāf (14)	kāf (22)
12. lamd	lāmed	ox-goad?	lambda	lawe (2)	lām (23)
13. mēm	mēm	water	mu	māi (4)	mīm (24)
14. nūn	nūn	fish	nu	nahās "serpent"	nūn (25)
15. semk	sāmek	prop?	Xei	sāt (7)	
16. 'ain	'ayin	eye	ou	'ain (16)	'ain (18)
17. pē	pē	mouth	pei	af (25)	fā (20)
18. šādē	šādē			šadai (23)	šād (14)
19. qof	qoph		koppa	kāf (8)	kāf (21)
20. rōsh	rēsh	head	rhō	re'es (6)	rā (10)
21. shin, sin	shin	tooth	sigma, san	shaut (5)	shīn (13)
22. tau	taw	mark	tau	tawe (10)	sin (12)
23					tā (3)
24				kharm (11)	thā (4)
25					khā (7)
26				ḍappā (28)	dhal (9)
27					dād (15)
28					zā (17)
29					ghain (19)
30			u		
31			phei		
32			khei		
33			psei		
			ō		

scholars from the beginning (and rightly so), that the names correspond to the form at the beginning of their history. Why, otherwise, would letters of an alphabet receive such names as "ox," "house," "door," etc.? It seems to us necessary to see back of each letter-name a picture of an "ox," "house", and "door."^{*} That being so, we must ask ourselves concerning the probability of either the form or the name changing identity in the course of time. Have we any evidence that either of them has changed, and which would be apt to change most? In other words, upon which can we depend for our primary evidence as to the nature of the original alphabet?



Gardiner considers that the names are primary; Grimme looks upon them as secondary. As a matter of fact, we cannot claim that all of the names or all of the forms are as they were in the beginning. Concerning the unintelligible names we cannot judge either them or their letter-forms. In respect to the others, the principle of acrophany, which is everywhere present, seems to indicate that the names have not changed since their conception. On the other hand, it is possible for them to change and still retain their acrophonic character. For instance, the Ethiopic name for ḥ is nahas, which is a differentiation from num, but it still begins with n. The same is true of yaman and yod. However, it is also possible for the name to lose its acrophonic character, as in the case of the Ethiopic name, af, (for pe).^{**} Since this has nowhere occurred in the Phoenician-


* Gesenius first asserted this fact many years ago.

** The Ethiopic alf, bēt, geml, kaf, ʿain are the same as the old Semitic names. Qāf instead of qōf, on account of the great predominance of the fundamental vowel a in Ethiopic. (See Billmann §18). Tait and Ṣadai have resolved

Greek alphabet, we are safe in supposing the intelligible names to be as old as the letters themselves. As Gardiner points out, they are not corrupt and there is nothing about them to indicate that they have deteriorated.

Moreover, it is only when they are compared with the forms of the letters that any question as to the names arises. We have already mentioned that Lidzbarski would change the names to fit the forms. Perhaps, however, the forms should be changed to fit the names! It seems that the forms would sooner deteriorate than the names. This statement is perfectly reasonable when we consider the possibility quite apart from the relation of the two to each other. Forms of letters do change as we have seen. It is true that words change also, but the names of letters have not radically changed in subsequent history. So, when we consider the two together we are face to face with the fact that a group of perfectly intelligible names are attached to letter-forms which in some cases actually resemble the object named. Whether the forms to which we are first introduced have changed appreciably from their prototypes can only be determined by an examination of that prototype. If the forms are as ancient as Petrie would have us believe, and if the ancient signs furnish a direct line of descent, then we are bound to admit that the forms have not appreciably altered. If, on the other hand, the

the diphthong ē into ai. Re'es = Ethiopian "head." Māi = "water." Ethiopic "hand" = , so 'yaman' "right hand" was used. Nun "fish" was not found in Ethiopic, so Nahas, "serpent" was used. Wawe and Tawe instead of Waw and Taw is an indication of an early "ending in a fugitive e." (see Dillmann § 38). The Arabic حَوْط, Haut of similar meaning instead of Hēt. The new name Harm () "hedge" designates the sister-sound. Zai, Dent, and Lawe (Law) are corruptions of Zain, Dalt and Lamed. Hōi is obscure. Šaut and Sāt also obscure. Paiṭ formed from analogy with Taiṭ. Pa = Gr. pi. (see Dillmann on names pp. 17-18).

prototype is to be discovered in pictorial writing, we must conclude that there has been considerable change. While there ~~while there~~ is a certain pictorial character to some of the letters, the slight resemblance does not justify on the whole the names attached. The forms must have altered after the names were given, if the names mean anything at all. But the fact remains that the forms of the 13th century, as we now know them from the Aḥîrâm inscription, are not much different from those of the 9th, 8th, and 7th centuries. During this time, therefore, there would be no need for a change of names. It can be set down as a principle that the change of name in every case came after the change of form or upon the transition of the alphabet from one people to another. If the letter-name for  was later changed from nun "fish" to nahas "serpent". in the Ethiopic alphabet, it is best explained on the basis of a change in form.

If these observations be true, the names are as old as the forms to which we find them definitely attached in the fifth century. (The names appear for the first time in the LXX text of Lam. 1-4). And there is no obvious or conceivable reason why the names should have been invented in the 5th or 6th century. The Phoenician letters at that time were not changed in outline enough to warrant any change of previous name, and at the same time, they did not present a sufficient resemblance to the objects the names represent to call forth such labels for the first time. We must concede the antiquity of the names IF we grant any connection at all between name and form.

If, on the other hand, they have no connection whatever, but were a late invention, how can we account for the unintelligible Semitic names? Why would not intelligible names be chosen for \aleph , π , λ , τ , and ρ , such as har, "mountain"; halton, "window;" tabba'ath, "ring;" sis, "flower;" and kesheth, "bow?" There were names in abundance available beginning with the proper sound. The ~~late~~ invention^{therefore} of these names, whatever their origin, originated much earlier than the 6th or 7th century, and if our reasoning above be correct, they must have been in existence in the 13th century.

It seems highly probable also, from the Greek treatment of the gutturals, that the Greeks adopted the letter-names at the same time approximately that they took over the letters themselves. Gardiner calls our attention to a casual statement of Prätorius to the effect that "the a-sound attributed in Greek to the Phoenician letter \aleph may be due to the vocalization 'alf of the name of that letter." Gardiner* goes on to say: "The same observation applies to the other three letters as well: the Greeks had no use for the gutturals \aleph , π and τ , and but little use for the guttural λ ; if they took over the letter-name at the same time as they took over the actual letters, is it not natural that they should have ignored, or possibly have failed to hear, the initial guttural in these, and that they should have adopted the following vowel as the letter-name? Thus on the acrophonic principle itself $\aleph=(?)$ alf would yield a, $\pi=(h)$ ē would yield e or η , and $\lambda=(h)$ ēt would yield e. The value o

* JEA. III. p. 10.

or ω for γ (')ain seems at first to contradict this view, but when we remember that emphatic sounds tend to give to α the colouring of γ it will be seen to be quite plausible that ain may have sounded to the Greeks like $\alpha\iota\nu$, and may consequently have produced the letter-value ρ . The conclusion, therefore, which I would draw from the vocalic values of κ , π , ρ and γ in Greek is that the letter-names were already in use when those values were determined."*

Notwithstanding the antiquity of the letter-names, we must ask ourselves three questions concerning them. (1) Are they non-Semitic names borrowed by the Semites when they borrowed the letter-forms? (2) Are they Semitic translations of the foreign names of the borrowed letters? (3) Are they Semitic names given afterwards to borrowed forms?

At the outset we all may agree that the big majority of the names are Semitic in their present form. But there are a few names that are not Semitic as far as we know. Are these foreign names? Macalister** would have us believe that not only they but all the letter-names were original in a hypothetical Hellenistic language as represented by his Phaestos Disk. He says: "It is commonly assumed that because the names of the letters have a meaning in Semitic, and no meaning in Greek, therefore they are Semitic words adapted into Greek. This is, however, a non sequitar. It would be more probable that the

* Gardiner also believes that Nöldeke has, by deducing the the Ethiopic letter-names from the Sabaean, admitted that "the names are as old as the common parent of the Greek, Phoenician and South-Semitic alphabets."

** The Philistines, pp. 129-30.

borrowing nation should cast about for words similar in sound, and possessing a meaning which would make the names of the letters easily remembered. Such an attempt would be sure to be unsuccessful in some cases....It may thus be that all the letter-names are a heritage from some pre-Hellenic, non-Semitic language."

Dussaud, also, who had an interest in the Aegean origin of the alphabet, quoted the Slavonic dobro "oak" as an instance of how foreign names may be adapted to the language of the borrowing nation. He said: "En général, le peuple qui emprunte le nom de la lettre fait subir à ce nom une déformation pour lui trouver un sens dans sa langue. Ainsi delta n'a pas de sens; mais la lettre empruntée par les Slaves a pris le nom de "dobro" qui signifie 'chêne'".*

Evans does not go the length of denying that the intelligible letter-names refer to original objects, but he believes that they are translations of Cretan names and that the unintelligible names are the original Cretan names left untranslated. On page 94 of his *Scripta Minoa* he remarks: "It looks as if names such as têth and koph were literally taken over from the original tongue--ex hypothesi that of the Philistine colonists. In some cases again, the names represent, perhaps, rather the first syllable, closed or otherwise, of the original word."

This effort to explain names which do not seem to be Semitic, is of course tempting, but we naturally want to know why these few foreign names were retained untranslated. Besides the Cretan forms that most closely resemble the Semitic forms

* Les Arabes, etc. p. 88.

are not these, but some of the others that have intelligible Semitic names. Alas! this theory cannot be proved (as we shall see), for we know nothing about the Cretan language. Much less can be said for the hypothetical Hellenistic language of Macalister and Dussaud. However we try to explain the few evidently unexplainable letter-names, we must not explain away the clearly Semitic names that we do possess. They must be reckoned with!

In an attempt to reckon with these Semitic names, Ball maintained many years ago that they were "Akkadian terms partially Semitized." "As for the conventional vocalization of the names, too much stress must not be laid upon it, as it is, at least in part, demonstrably modern, e.g., zayin, ayin, [ʔ], [ʔʕ]; and again, ʔܠܚ, ܢܠܬ, ܬܢܠ, ܬܢܠܐ, (cf. the Syriac 'alaph, gāmal, dālath with a variant dālad, semkath)."

Zimmern also, followed by Luckenbill, (as we shall see), has called our attention to twelve corresponding Babylonian names for the known "Phoenician" letter-names: alpu, ox; bîtu, house; gammalu, camel; daltu, door; idu, side; kappu, hollow hand; mû, water; nûnu, fish; ênu, eye; pû, mouth; rêšu, head; and šinnu, tooth.

Delitsch, however, has presented the best case for the Babylonian theory. He says that of all the Semitic languages, except the Babylonian, it is only the Canaanite that contains 'aleph, daleth and waw. "On the other hand, the Canaanite element of the Phoenician names bears unmistakable Babylonian traces: hêtu (ܢܠܬ) "circumference" has only been found till now in

* PBSA. XV. p. 398.

Babylonian; nûnu, "fish" is Babylonian (in Hebrew "fish" = דָּג); rêšu is the Babylonian word for "head;" the final vowel i of šîn calls to mind šîn, šinnu, "tooth;" and the "monothongizing" of ai in bêth בֵּית and mêm מֵם is one of the common Babylonian phonetic laws."*

These examples demonstrate well the fact that the Babylonian language was an influencing factor in Canaan at the time the letter-names were given to the letter-forms. All of this is in keeping with what we have already learned about the Babylonian influence at Byblus. We shall presently discuss the theory of the Babylonian origin of the alphabet, and the Babylonian influence will again be prominent in our next chapter on the "Order of the Alphabet", but for the present, it must be recognized that this theory is the only one that is at all in a position to actually demonstrate its claims regarding the names of the letters. Evans may claim that the names, or a part of them, are Cretan, but he cannot prove it. Macalister and Dussaud may claim as much for a Hellenistic language, but they cannot make good the claim.

We must conclude that the names are Semitic, but they are probably the Semitic of the Babylonian literary period. Sayce may be right in saying that the "dialect to which the names belonged was neither Canaanite, Aramaic, Arabic, nor Assyrian. But it had close affinities to both Canaanite and Assyrian and is possibly a Canaanite dialect spoken in Northern Syria before the introduction of Aramaic."** There are those who look upon the

* See our chapter on the Mesopotamian origin.

** PSBA. 32. p. 221.

Greek form of the names as Aramaic emphatic nouns, but Nöldeke explains alpha, beta, etc., by saying: "Die Griechen vermieden, dem Charakter ihrer Sprache gemäss, den Auslaut auf eine Muta durch Anhängung von a."* Jensen also remarks: "Andrerseits steht die Herkunft[†] der griechischen Buchstaben aus dem altsemitischen Alphabet völlig fest."** Cook likewise states that "the names themselves are, if anything, Canaanite rather than Aramaean."***

We are ready to agree with these scholars. The names might well have originated in Northern Syria in either case. And perhaps when the particular Canaanite dialect that gave them birth is discovered, all of the names will become intelligible. Just now, however, we cannot be sure from the names that we do know that they refer us to a people of the desert or the sea, to bedouin, townsmen, or traders. The water and the fish point one way, while the camel (?) and the ox would indicate roaming and settled life, respectively. At any rate, they are all common words, and were given to the picture aspect of the early letters.

The names would be an indication of the dialect used in naming the letters, but not an indication of the origin of the objects named, nor even necessarily the place the alphabet was named. Certain words used in this sentence might conceivably reveal the fact that the dialect is American, but that does not preclude the actual fact that it was written in Great Britain.

* Semitische Sprachwissenschaft, p. 134.

** Geschichte der Schrift, p. 155.

*** Camb. Anc. Hist. III. p. 418.

Furthermore, certain objects described in this chapter might be distinctively Scottish although described in the English used in America. In other words, the inventor of the alphabet might well have known both the desert and the sea through travel; a Syrian could very well use his own dialect even in Egypt! If this is true, there is nothing against the thought that the alphabet was conceived and even named with words from a dialect far from the native home of that dialect.

We have been brought to the belief, therefore, by the evidence involved that in the place where the alphabet was named there were several contributing influences. (1) There was the dialect from which the names were chosen; but it need not be native to the place. (2) This dialect, being written in Babylonian cuneiform, was colored naturally by the Babylonian. (3) There was the obvious principle of acrophony at work. (4) Undoubtedly, the names were chosen to fit real or fancied pictograms. Therefore, a pictographic writing was one of the influencing factors that determined the names.

We, therefore, believe in the following summary: The first attempts at forming letters were made on the basis of some hieroglyphs. The naming of those letter-forms was suggested by the Egyptian acrophonic idea.* The names themselves were chosen from a Semitic dialect greatly influenced by the Babylonian. The alphabet must, therefore, have been invented by an individual or group of individuals that incorporated all of these influences in his or their own persons. We shall return to this idea in a later chapter.

*  r from ro "a mouth;"  p from poy "a stool;" etc.

THE ORDER OF THE ALPHABET

Having thus far examined the names of the letters, it is now our duty to inquire into the order of the alphabet. It is, of course, plain to anyone that no ordinary inscription can acquaint us with the alphabetic order of the letters used in that inscription. Only an inscription bearing the actual alphabet can do this and unfortunately we have none in the Semitic script. But there are other means whereby we have secured our knowledge of the alphabetic order of the Semitic characters. As Taylor* points out, there are three other means at our disposal: (1) The numerical value of the letters. (2) Acrostic compositions. (3) Alphabetic transmission.

We find upon the old Jewish coins of the first and second centuries B.C. and the first and second centuries A.D. legends stamped in the archaic Hebrew characters. It seems to be, at first thought, a deliberate return to the ancient alphabet. But whether it is or not, does not here concern us.** We are interested, however, in the Hasmonean practise of using the letters of the alphabet to indicate numerals. The accompanying coin dated in the first year of Simon Maccabaeus with the use of the aleph, F, will indicate to the eye this Jewish practise. So far as this usage went, the letter-numerals correspond to the



From Madden's "Coinage"
p. 43.

* The Alphabet I, p. 185.

** See Clermont-Ganneau, Q.S. 1897, pp. 306-7. See also Cook in Q.S. 1909, pp. 287-8.

order of the Hebrew alphabet as we have come to know it by other means.

Our best knowledge of the origin of the Hebrew alphabet is derived from the acrostic poems of the Old Testament. They are Psalms 111, 119, 145; Proverbs 31:10-31; and the first four chapters of Lamentations. Psalms 37, 9 and 10, 25 and 34 are imperfectly acrostic, although probably older than the others. One, at least, has been conceded to be Davidic. Psalm 37 lacks only \aleph in our Massoretic text, which is, however, supplied by the Septuagint. ($\alpha\nu\omicron\mu\omicron\iota$ $\alpha\beta\gamma\delta$). In Psalm 9 daleth is missing and in Psalm 10, which continues the alphabet begun in 9, the first twelve verses after the first are not alphabetic. Some of these poems have the letters at the beginning of each verse; others at the beginning of each half-verse. The 119th psalm uses the same letter for the initial letter of eight successive verses before the next letter is used. The psalm is thus made up of 22 groups of eight verses each. Lamentations is normal, with the exception of the transposition in three of its four alphabets of the \aleph and \beth . Proverbs is normal. From these poetic creations, therefore, we get the well-known order of the Hebrew alphabet-- 1 α , 2 β , 3 γ , 4 δ , 5 ϵ , 6 ζ , 7 η , 8 θ , 9 ι , 10 κ , 11 λ , 12 μ , 13 ν , 14 ξ , 15 \omicron , 16 π , 17 ρ , 18 σ , 19 τ , 20 υ , 21 ϕ , 22 χ .

But this supplies us with the order of only the Hebrew alphabet, which may have been modified from the Phoenician!

As a matter of fact, it was not, for while we have no acrostic poems among the Phoenician monuments, nor did the Phoenicians use letters for numerals, we do know both from the Greek and the Samaritan that the Phoenician order was exactly the same as the Hebrew. The Samaritans, who retain to this day the old Phoenician forms of the letters, used the letters for numerals. The Greeks, who we are bound to maintain secured their letters from the Phoenicians, have supplied us with their actual alphabet, the order of which corresponds with the Hebrew order. The forms of the letters are closely similar, moreover, to the old Phoenician. We are, therefore, safe in concluding that the order of the Hebrew is the order of the Phoenician--in fact, of the North Semitic alphabet.

We now proceed to an examination of the Greek abecedaria. In a tomb at Formello there was discovered in 1882 a "plain amphora-shaped vase of black ware." On the vase were Greek alphabets, written from left to right as follows:

It will be noticed that E and F are transposed in the first alphabet--Roberts* says, by mistake. The arrangement of the last four letters is peculiar to the West. These are, of course, additions to the Phoenician. While the letters are written from left to right, σ in the second alphabet is

* Robert's Introduction to Greek Epigraphy, pp. 18-19.

written the other way, as B in the Caere alphabet, which probably indicates a transition period in respect to the direction of writing. Turning the letters around, therefore, and comparing them, in their order, to the Phoenician letters, it will be perfectly clear that the Greek order is the same as the Phoenician.*

From a study of the table on this page, it is evident that M corresponds to μ . On the abecedarium from Cervetri (ancient Caere), this letter takes on a form which occurs nowhere else, but resembles more closely the tsade. It is \curvearrowright , which turned around, is \curvearrowleft . But tsade recalls the Greek name zeta. Zeta, however, clearly has the sign of the Phoenician zayin and it rightly occupies that place in the alphabet. Another problem to be noticed is that Σ (21st Greek letter) corresponds in form to the shin W, but bears the name of samekh.**

It is probably true that the

** "The name samekh, with the normal addition of the emphatic aleph, would become samekha or samega and then sigma by metathesis of the labial and the guttural." Alph. II. 98. Sigma may, however, have come from $\sigma\iota\varsigma\omega = \sigma\iota\gamma\mu\omega$.

* For the new Marsiliana alphabet, see our plate between pp. 58 and 59.

Greek - Formello		Phoenician
1. A	α	\aleph
2. B	β	\beth
3. >	γ	\daleth
4. D	δ	δ
5. E	ϵ	ϵ
6. Z	(ν)	ζ
7. H	ζ	η
8. Theta	θ	θ
9. Iota	ι	ι
10. Kappa	κ	κ
11. Lambda	λ	λ
12. Mu	μ	μ
13. Nu	ν	ν
14. Xi		ξ
15. Omicron	$\circ (\omega, ou)$	\omicron
16. Pi	π	π
17. Rho	ρ	ρ
18. Sigma	σ	σ
19. Tau	τ	τ
20. Upsilon	υ	υ
21. Phi	ϕ	ϕ
22. Chi	χ	χ

Has worked on the tables of Greek & Latin alphabets

Concluded ancient history of the alphabet 470

Greeks once had a fourth sibilant known as san, which corresponded to the form of tsade, but which represented exactly the same sound as sigma Σ . We would then have Σ (the 21st letter) and M (the 18th letter) representing s. Herodotus* tells of a letter "which is called san by the Dorians and sigma by the Ionians." This statement, according to Roberts, "makes it highly probable that we have in the M of the older Dorian inscriptions (of Thera, Crete, Corinth, Argos) what he understands by san, and in the Σ of the older Ionian inscriptions (of Miletos, Naxos, Samos, Athens) what he understands by sigma."**

The abecedaria from Caere mentioned above is older than the Formello vase but not so perfect. The koppa is accidentally omitted, accidentally because it appears among the letters of the syllabary on the same vase. The l and m are unfortunately injured. Otherwise the letters are practically the same in form, and the order is exactly similar.



It will not be necessary at this point to concern ourselves with the history of the additional Greek letters. They may be studied in connection with the history of script, or even in a study of relations,*** but they have no bearing on the order of the twenty-two "Phoenician" letters. Nor will

* I. 139.

** op. cit. pp. 9-10.

*** See chapter II.

it be necessary to go further into the other Greek abecedaria. The alphabets of Colle, 'Cepolla', Corinth, and Calymna may be studied in Robert's Introduction to Greek Epigraphy.*

We have shown beyond a doubt that the received Semitic order corresponds to the ancient Greek order as revealed perfectly in the Formello alphabet. Our next question concerns the age of this order. As we have indicated above, the alphabet from Caere (Agylla or 'round town') is the oldest of the abecedaria. It was found in an ancient tomb at this small village midway between Rome and Civita Vecchia. The tombs of this place are "more archaic in style than any that have been found elsewhere, some apparently, being of pre-Etruscan date." However, the Caere need not be considered much older than the Formello. Both correspond in order, forms, direction of writing, the four extra letters at the end, and the retention of Phoenician letters which afterward fell from use. All of this leads Taylor to the conclusion that "these abecedaria cannot be earlier than the 7th century B.C. or later than the 6th. "I should be inclined," says he, "to name the middle of the 6th century as the date on the whole least open to objection."** This is probably a fair statement of the case. It was in this century that the *βοοτροφήδον* (plough-like) method of writing prevailed. It undoubtedly represented a transition period between the earlier direction of the writing from right to left and the later direction of left to right.

* pp. 18-19.

** Alph. II. p. 78.

While the latter direction is followed in the abecedaria, there are two or three of the letters facing the other way, which would indicate, as we have remarked, a period of transition. This is also supported by the forms of the letters. For instance Λ is supposed to be older than A but in the Formello alphabets both forms appear. \bar{E} is an older form than E but I is later than Z . On the whole, we cannot prove that the present order of the alphabet is older than the seventh century, nor can it be denied that it is, at least, as old as the 5th century.

Aside from direct information such as the abecedaria supply, one can assume that the present Hebrew order came on down with the Aramaic alphabet which the Hebrews adopted. They would be apt to adopt the order of the Aramaic letters as well as the letters themselves. The Aramaeans began to develop their own alphabet about the 7th century. Would this be the origin of the Hebrew order? But that would be to reason in a circle. If the Greek order shows that the Phoenician order was the same as the Hebrew, and if the Aramaic, Greek, and Hebrew were all derived from the Phoenician, then the present order was original with the Phoenicians. If we are to assume that the order of the letters were given to the Greeks and Aramaeans at the same time as they received the letters, we can then claim a much greater antiquity for the order, for the Greeks unquestionably adopted the letters some where near 1000 B.C. But this is to presume!

Our next question concerns the factors that determined the present order. Here we are in the realm of more speculation, more or less reasonable. There are, however, a limited number of factors available.

Setting aside for the time being the possibility that the twenty-two letters were not all invented at one and the same time, and therefore, that the letters fell into their order as they were invented, we have the more likely possibility that the meanings of the names, or their sounds, or their forms, have regulated the order.

The meaning of the letter-names could hardly be neglected in this problem unless we assume them to be a later invention than the order itself--an assumption wholly unwarranted. Those of us who have used Egyptian dictionaries are familiar with an alphabet arranged entirely on the basis of the meaning of the symbols. It has been felt that the same is undoubtedly true of the so-called Phoenician alphabet.

There are, for instance, those who have tried to connect these names with the phases of the moon. We will mention in another connection the great "star symphony" theory of Hommel. As late as 1913 E. Stucken published a little book of 52 pages entitled "Der Ursprung des Alphabetes und die Mondstationen." Only four pages are devoted to the origin of the alphabet. Most of the book deals with moon phases among the peoples of the earth, but in chapter 5 he raises the question of the connection between the Hebrew phases of the moon and

the Hebrew letter-names of the alphabet. He thinks he finds in Job the 24 Hebrew moon stations. For instance, in Job 38:5-6, which speaks of the "foundations of the earth," he sees a reference to $\aleph \beth$, "house". In Job 38:8-11 which begins, "Or who shut up the sea with doors", ($\aleph \beth \daleth \aleph$) he finds the moon stations which are supposed to have given rise to the letter-names, gimel and daleth. In the first case, \beth means "fluid," and therefore "sea." In verse ten he finds the word \daleth which he equates with $\aleph \beth$ = lattice. \beth is found in the address to the "proud waves" in verse 11. Job 40:24ff. is supposed to furnish both the moon-stations and the letter-names from \aleph to \aleph . But throughout the whole eclectic process much is left out that could just as properly have been used! Schultz says: "In this chapter Stucken has not given even the shadow of a proof of 24 (or 22) Hebrew moon stations in the Book of Job nor proved that there is any agreement between these stations and the 22 letters."* But Stucken, after comparing the Arabic moon station names with the Hebrew letter-names concludes with this startling statement: "Ich glaube hiermit den Ursprung unseres Alphabetes nachgewiesen zu haben."** Thus we find that the meaning of the names of the letters, according to this theory, are derived from the Hebrew moon-stations as revealed in the book of Job and that their order has determined the order of the alphabet!

But Schultz was not satisfied with Stucken's results. He criticised him as lacking an historical perspective, and for

* OLZ. 1914, cols. 212-213.

** Hommel finds its origin in Chaldaean astronomy!

omitting the question of the pictorial value of the letters, and the reason for the acrophonic choice of names. He, therefore, corrects Stucken's results, but admits that "Stucken has disclosed some very remarkable phenomena which can be interpreted as meaning a connection between the moon stations and the letters." The combined effort of the two men is given below:

22	house: -----	--Luck to the sacrificer.	
	letter name: Aleph	--Ox	
2	house : al-Butáin	--inner }	logical connection.
	letter name: Bēth	--house }	
3	house: al-Turájja	--goat (?) }	logical connection.
	: Gimel	--Kamel }	
4	house: al Dabaran		
	: Daleth	--door	} identical.
5	house: al Haḳ'a	--door (ikku)	
	: He	--latticed window	} logical connection.
6	house: al Han'a		
	: Wāw		
7	house: al Dira		
	: Zajin		
8	house: -----		
	: het	--hedge	
9	house: al Ṭarf		
	: Ṭet	--(Egyptian hand?)	
(Jōd, Kaph, Lamed give no result.)			
14	house: al Simāk	--fish }	identical
	: nun	--fish }	
15	house: -----	--post }	identical
	: Sāmek	--post }	
(Ayin and Pê give no result.)			
18	house: -----		
	: Šāde	--fishhook }	logical connection
19	house: al Šáula	--thorn	
	: Qōph	--back of head }	logical connection.
20	house: -----	--	
	: Rēš	--head	

21 house: -----
: Shin

1 house : ----- --The two signs } identical
22 letter name: Taw --Signs }

Schultz calls our attention to the alliterations. They are Buṭáin--Beth; Dabarân--Daleth; Haḳ'a--He and Han'a; Dira--Zajin; Ṭarf--Ṭēt; Simâk--Sāmek. They are not all, however, in the same "moon-house." The same objection may be raised against his "identities" and "logical connections."

Another attempt to establish the order of the alphabet by reference to the letter-names was made by Bartels.* He doesn't use the names of the letters so much as the letters themselves. It is not a question of their form or their sound either. In fact, it is difficult to classify his attempt. At any rate this is probably the best place to introduce it.

First of all, he follows out Baur's earlier proposition that the letters have been arranged from actual words. Baur**, in dealing with the Ethiopic alphabet, found that its first four letters spelled $\square \pi \zeta \pi$ "the bread;" and that the next two spelled $\gamma(x) \omega$ "flesh." Bartels suggests that $\square \pi \zeta$ may also mean "fish" (according to Sayce and Tomkins) and "wind, breath, spirit" (according to Houtsma). He compares also the Arabic luḥm, a mystic fish. Before he had thus enlarged the meaning of l-ḥ-m, he had laid down three general statements: (1) There was a time previous to when the letters were used for profane intercourse, in which they expressed mythical meanings. Ancients have always looked upon writing as magical. (2) Traditions of various peoples ascribe invention to quite a definite

* ZDMG. 69, 1915. pp. 52-58.

** id. 67, pp. 501 and 767.

idea of God: Thout, Ea, Nebo, Marduk, Fû-hi, Hermes, Prometheus, Euander, Odin, etc. (3) It is remarkable that all writing and writing gods came from the water, so that writing was never invented on the spot, but was always brought in. He then asks the question: may this alphabet have come to the Ethiopians through a fish? He names the Philistine god, Dagon, as both a fish and bread god.

He thinks also that 𐤀𐤍𐤍 must mean something else beside "flesh," and considers it important that in Babylonian, šīru, 'flesh', 'oracle', 'relationship,' and 'residium' coincide. Therefore, the l h m s r of the Ethiopic alphabet points on the one side to bread, fish, spirit, and on the other, to oracle or omen, that which remains, and relationship. He would, therefore, bring in the religious and mystical element into his study of the alphabet.

Instead of translating the first two letters of the North-Semitic alphabet-- 𐤁𐤍 --as "father" and the next two -- 𐤂𐤌 -- as "grandfather" (such as Baur had done), he could see no reason for not translating them as "father (in the sense of author) is Gad." In other words, this is the God of Fate, the originator of the order of the alphabet. He thinks that Fate cannot be separated from a study of the alphabet. In fact, his main interest lies in hepatoscopy or liver worship. In his study of the mantic livers, he arrives at the conclusion that writing and hepatoscopy were closely related and belonged to the worship of a hairy, wolfish or dogish god. He looks upon it as remarkable that the Philistine God was identified

by the Egyptians as Seth, i.e. one of the wolf gods. The highest Egyptian wolf-god dwelt on the threshold of the underworld, and Dagon-worship held the threshold sacred. Similar ideas found expression in the mantic liver worship. In astrology the idea of the "gate" was prominent.

Finally, Bartels finds that the name of Gad (along with kid, and Koriander, etc.) comes from a root that has the idea of cutting out, dissecting, and makes the significant statement that one has to cut to get into the liver, to get sticks to throw, and to inscribe! All of which is interesting, no doubt, but a far cry, it seems to us, from the practical problem of the order of the alphabet. If the magical and religious motive entered so deeply and mystically into the formation of the alphabet, the solution of the problem will probably remain closed to us for all time.

A more definite attempt to determine the factors that entered into the arrangement of the letters was made by Zimmern in 1896.* He then sought to show that the order of the North Semitic alphabet was greatly influenced by the order of the Babylonian signs as found in Syllabar A.

Peiser,** before him, had proved that the Babylonians had arranged their some 400 signs in a sort of graphic alphabet. Even Evans admitted "that the Assyrian signs, amounting to about 400 in number, had a fixed order, has been demonstrated indeed by Dr. Peiser, and it appears from the Tell el-Amarna tablets that this arrangement, which must be regarded as

* ZDMG. 50, 1896, pp. 667ff.

** Zeit. für Assyriologie, i. 95ff. and id. ii. 316ff.

Old Babylonian, was already current in the West at the beginning of the 15th century B.C."*

Zimmern, therefore, chose from among these signs in Syllabar A twelve that possess similar names in the West Semitic.

1. mû, water (1)
2. nûnu, fish (17)
3. ênu, eye (42)
4. pû, mouth (51)
5. rêšû, head (52)
6. (šinnu, tooth)
7. alpu, ox (105)
8. bîtu, house (147)
9. (gammalu, camel)
10. daltu, door (155)
11. idu, side (140?)
12. kappu, hollow hand (140?)

The numerals in parenthesis after each name indicates the order of that sign in the Syllabar (as Zimmern knew it). Since Zimmern's ^{wrote} day, we have learned more about this Syllabar, and the numerals would be different now, but so far as we can see, the order has not been changed.

Concerning šinnu, he remarks that in the Assyrian it is the same ideograph as pû, "mouth", and could therefore "hardly be represented by a different number." He thinks that gammalu was probably not native to Assyrian, but was adopted from the Semitic nomads. "In any case, there is no simple ideogram for gammalu to be expected in the above list." Of the last two signs in the list above he says, "Idu and kappu have the ideogram ID, which occurs in the list as 140; that is to say, at a place that doesn't fit the Phoenician order. It should

* Scripta Minoa, I. p. 83.

be noted that idu in Assyrian has no longer the original meaning of "hand", but the derived meaning of "side", and that kappu, meaning "the palm of the hand," is a rare word in the Assyrian."

It will be noticed that idu and kappu are, therefore, out of place in the above list. Their proper place is between alpu and bitu which spoils the West Semitic order. They are also identical in Babylonian, which is not true of the West Semitic. Furthermore, šinnu is identical with pû, but not having a number, this does not collide with the West Semitic order. The only necessity in this case (and the other) is to presume that the "Phoenicians" adopted the two names of the one Babylonian sign for two symbols of their own. But as Zimmern himself says, the chief difficulty is "the immediate succession of pû (51) and rêsu (52) and the beginning of the series with mû instead of alpu." The first difficulty crowds out the West Semitic Qôf and Sâdê, which is a real difficulty, but as Zimmern says, probably "the origin of the Phoenician alphabet was not so mechanical that the Babylonian pattern was taken over entire." Luckenbill* has also called attention to the fact that the Syllabar as found among the Amarna tablets diverges slightly from the late Assyrian order. For instance, tir is inserted after dar.

Concerning the second difficulty, Zimmern asks for a quite arbitrary transposition of the first six and the last six characters, which, compared with the Phoenician alphabet,

* AJSL. 36, p. 38.

would give us the following table:

1.	'Aleph	alpu, ox (105)
2.	Beth	ôitu, house (147)
3.	Gimel	gammalu, camel
4.	Daleth	daltu, door (155,
10	Yodh	idu, side (140?)
11	Kaf	kappu, hollow hand (140?)
13	Mem	mû, water (1)
14	Nun	nûnu, fish (17)
16	'Ayin	ênu, eye (42)
17	Pe	pû, mouth (51)
20	Resh	rêšu, head (52)
21	Shin	šinnu, tooth

Luckenbill explains the transposition which Zimmern arbitrarily demanded. He says that 'aleph took first place in the West Semitic alphabet because Syllabar A begins with a; and that a was used in Babylonian not only as a vowel but as a consonant, that is, spiritus lenis. (tiamtu; cf. ti'amtu) Luckenbill concludes: "The order of the letters in the Semitic alphabet was influenced by the order of the signs in the Babylonian Syllabar A. This, I believe, is a certainty."* Sayce, on the other hand, believes that the alphabet begins with 'aleph because alûph denotes "a leader" in West Semitic. "It ends with the sign which represents the end of the sentence in the Cretan hieroglyphs."**

It would seem that the Babylonian Syllabar may have influenced the order of the alphabet, but we pass on now from a consideration of the names to that of the sounds as a determining factor. Perhaps the most scientifically arranged alphabet phonetically is the Sanskrit. There are seven classes of letters arranged according to the organs of speech that are

* op. cit. p. 33.

** PBSA. 32. p. 222.

used in pronouncing them. It is thought by some that such an arrangement may have been made by the Semites. For instance, Taylor* would have us notice the order of the sibilants. By transposing ד to somewhere between ב and ג , he notes that ב is the seventh letter, ב the 14th, and ג the 21st. He calls these the "sabbatical letters" and attaches so much significance to them that he feels warranted in putting them to one side while he considers the plan on which the other letters may have been arranged. He groups them in four divisions thus:

א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ

"The first division contains three soft mutes, b g d; the second contains three continuants, v x t; the third, three liquids, l m n; and the fourth, three hard mutes, p q t." In the first, second, and fourth divisions, he remarks that the arrangement within each is a labial, palatal, and dental. Each division, furthermore, is headed with a breath characteristic of the group. For instance, ב heads the soft mutes, and פ the hard mutes. ד and נ do not fall into his arrangement, but he postulates that each of them had not been differentiated from ב and פ at the time the order was made. On the other hand, after they had been differentiated, their presence threw the original plan out of gear and it was ultimately forgotten. What he supposes to have been the original plan is given at the top of the next page.

* Alph. I. pp. 185ff.

	breaths	labials	palatals	dentals	sibilants
Soft	א	ב	ג	ד	ה
Continuous	א	ב	ג	ד	ה
Liquid	ו	ז	ח (ך)	ט	י
Hard	א	ב	ג (ך)	ד	ה

A similar attempt to explain the Semitic order has been made by Thomson in his book on the Samaritans.* He notes three original groups.

אבגד אהיכמנ צפצף ק

Of the first, he calls attention to the fact that there is a weak letter, a labial, a guttural (English sense) and a dental, and that the last three are mutes. He calls the next group aspirates, and notes the same order with the exception of the sibilant ה which he says has the "flat sound associated with mutes." It may, therefore, have originally belonged to the first group. He suggests as a possible reason for its having been excluded from that group the fact that "if it occupied the third place it made with beth the ill-omened word אה "contempt," and the equally ill-omened word אה, "a prey." He also explains the presence of the hard dental (lingual) מ among the aspirates on the basis of the corresponding Greek 'theta' which is actually an aspirated letter. In the place that ה now occupies the aspirated sibilant ש should have been, but with the following letters it would have spelled

* p. 219.

the ill-omened 𐤠𐤢𐤣 "to slay," so it was relegated to the end of the alphabet. One cannot help asking at this point why it did not simply exchange places with 𐤤 so that each group would have a sibilant. Thomson's third group begins with the weak letter 𐤥 , followed by 𐤦 (labial), 𐤧 (sibilant), 𐤨 (guttural), and 𐤩 (dental). Concerning 𐤪 , he thinks that it was the last to be added to the list of letters. It will be noted, too, that he has left out the whole group 𐤫𐤬𐤭𐤮 . Of them he says: "The arrangement followed in the liquid group may have been the result of intrusion from another alphabet which began with the liquids. The Romans seem to have originally had such an alphabet, and hence called the letters *elementa*." A final point in his explanation is this: when the 𐤪 finally developed from the 𐤫 , and when the 𐤬 was displaced from its original place, they were placed at the end of the alphabet, but before 𐤩 , because 𐤫 and 𐤩 had become synonymous with the beginning and end of things!

Sayce also thinks that 𐤯 has been shifted from its proper place after "the other sibilant" 𐤧 . "Hence the confusion in the Greek alphabet, where sigma has taken the place of shîn, the non-Semitic Xi being substituted for samech, while in Doric, where the old name san (implying an Ionic $\sigma\eta\nu$) was preserved, the name of sigma was lost."*

This juggling with the letters is an interesting pastime, but hardly convincing. Too much needs to be explained. However, there are affinities of phonetic values that very

* PSBA. 32. p. 219.

probably explain certain relations. As Cook points out, "the sequence of the liquids, l, m, n, seems hardly a coincidence."* In addition to these, Jensen and also Kautzsch** point to the three voiced media, b (labial), g (palatal), and d (dental). Lidzbarski thinks that "mnemonic motives must have affected the arrangement more than any inner affinity or external influence,"*** but these mnemonic devices have to do with the names of the letters rather than their phonetic values. However, the number of syllables in these names may be said to be related to phonetics, and Lidzbarski is probably right in saying that it was not mere chance that the monosyllabic names are all together. Names also whose meaning cannot be now discovered may be creations for mnemonic purposes, such as 𐤀𐤁𐤏 and 𐤀𐤁𐤏 or 𐤀𐤁𐤏 and 𐤀𐤁𐤏. Pilcher**** thinks that all the names were mnemonic devices, and that a familiar name beginning with the desired sound was chosen for each character, with no reference whatever to pictorial prototypes.

We pass from a consideration of phonetic to geometric values. There are those such as Pilcher who claim that the alphabet has been independently invented on arbitrary geometrical lines. We have already explained his theory in part above, and will give it more extended attention in connection with a succeeding chapter, but we are here interested in his ideas on the order of the alphabet. He thinks that that order has been entirely determined by the structure of the letters, and that they are capable of being grouped originally as follows:

- * Cambr. Anc. Hist. III. p. 420.
- ** Kautzsch-Gesenius Grammar, p. 30.
- *** Ephem. I. p. 135.
- **** PSBA. 26, p. 173.

† ‡ №	T Z S
7 7 7	G V H
l 7 7	L N M
4 4 4	D R B
o q o	O P Q

Assuming that 5 had some such original form as V, the third group is more intelligible. He points out the fact that even the head of the modern 5 projects above the level of the other characters. He also remarks that because the last triad has a circle for its radical element rather than a straight line, it must have been a later addition. He assumes, therefore, that there were twelve original letters and arranges them thus:

4 4 4 7 7 7	B R D H V G
7 7 7 7 7 7	M N L S Z T

But these twelve letters were not sufficient for writing any Semitic language. The initial breathing X was needed which was formed by putting a line to the left of the angle < of the first triad, thus K, instead of to the right, as in 4. The sibilant W was also needed which was derived from the 7, thus W. Since Aleph and Lamed were the only letters with the line to the left, they were put at the beginning of each line for symmetry. "Kaph, being merely aleph, K, reversed, was probably the next addition." So we have:

K 4 4 4 7 7 7	X 7 7 7 7 7 7
7 7 7 7 7 7	W 7 7 7 7 7 7

Thus far does Pilcher go on the geometrical basis, but concludes that "the subsequent development of the alphabet seems to be best explained by attempts at phonetic arrangement." He would, therefore, shift \aleph and put it with the other two sibilants, \daleth and \yod ; and because BRD is "phonetically bad" he would change places with λ and γ , thus getting the three typical "soft explosives" together. Then, because "all the soft sounds were in the first row, and all the hard sounds in the second row," except zain, he would again interchange γ and \yod . He now has:

א ב ג ד ה ו ז
 ח ט י כ ל מ נ

Then from \aleph , η , and γ were made π , μ , and ι which were placed at the end of the first line. The morphological series constructed on the circle, ϕ χ ψ , were next brought in and placed not at the end of the second line, but, for some unknown reason, just before γ μ η . So he gets:

א ב ג ד ה ו ז ח ט י כ ל מ נ
 פ ק ר ש ת צ כ

Last of all, ζ is differentiated from μ and placed not after μ , but midway between \daleth and μ ! The alphabet has arrived!

It will be seen that Pilcher believes that the first twelve letters of the alphabet were deliberately constructed on geometric lines, but that additions were made as the Semites came to value the phonetic side of an alphabet. The elements

that entered into the making of the order of the alphabet were, therefore, morphological and phonological. He neglects entirely the names and their meaning. While we cannot, therefore, follow Pilcher in all his morphological manouverings, yet the similarity of certain forms that are grouped together leads us irresistably to the conclusion that this element must have entered into the making of the final order of the letters. Such are ω and γ and the Ξ followed in the ancient Greek alphabet by φ (F).

What, therefore, were the elements that determined the order of the ancient alphabet? We believe that all three of the elements we have been discussing made their contribution. That this should be quite reasonable is evidenced by the fact that the order of Syllabar A was also determined partly by the meaning, partly by the sound, and partly by the form of the characters*. The surds \underline{b} , \underline{g} , \underline{d} and the liquids \underline{l} , \underline{m} , \underline{n} are undeniable. The forms of γ , ω , and Ξ , φ also seem to be significant. And there are certainly similarities in meaning that must be explained, regardless of how one may interpret some of the doubtful names. Thus, Sayce finds that by shifting samech "to its rightful place after shin," the characters have been ranged in pairs, as far as meaning is concerned. "First we have the 'ox' with the 'house' or 'tent' of its master, then the 'camel' at the open 'door' of the tent. Next come the 'house' of stone, brick and wood, with the 'nail' used in its construction; the 'weapon' and the 'fence'; the 'cake of bread', and the 'hand' that

* Cook, Camb. Anc. Hist. III. p. 420.

made it; the open 'hand and arm' with the 'ox-goad' or lituus; the 'water' and the 'fish'; the 'eye' and the 'mouth'; the 'trap' and the 'cage'; the 'head' and the 'tooth'; the samech, whatever that may be, and the tau."*

While we may not be prepared to adopt either Sayce's interpretations or his fanciful arrangement, we cannot deny that letter-names of kindred meaning have been placed side by side. For instance, so far as we have been able to discover, everybody agrees that 𐤁 means "water" and that 𐤁 means "fish;" or if the Ethiopic nahas, "snake" is used, it could very conceivably be a "water-snake." Thus it is significant that 𐤁 and 𐤁 resemble each other in form, sound, meaning, and position in the alphabet. Again, everyone agrees that 𐤁 and 𐤁 mean "eye" and "mouth" respectively; also that 𐤁 and 𐤁 mean "head" and "tooth."** Jensen distinguishes three groups: (1) possessions and utensels, (2) water, snake, and fish, (3) human head and parts of it. Then follows the cross. Grimme also agrees with the second group above and makes the last seven letters to designate parts of the human body. So in spite of differences of opinion on meanings, we can safely conclude that the principles that have been used in forming the Egyptian and Assyrian dictionaries and the Sanskrit alphabet have been used on the primitive alphabet, namely, ideology, morphology, and phonology. Perhaps, we ought to add chronology.

Our next inquiry is this: does the order throw any light on the origin of the letters? We concede that nothing

* PSBA. 32, pp. 221-2.

** It is true that Grimme makes the latter mean "penus", but if so, they would both still be parts of the body.

can be definitely proved by the order, but if it is at all significant in revealing the place of origin, we would have to name Babylon. However, everything points to the conclusion that the order of the letters came some time after the invention of the letters themselves. The order in the Babylonian Syllabar A may have influenced the Semitic order but it is really just as likely that mnemonic reasons were largely at play. Sounds, forms, and meanings were arranged to aid the memory. Insofar, then, as the Syllabar was likewise constructed, it may have been used, but any similarity of order might well be coincidence. If the order came with the invention itself or shortly after, the example of the cuneiform would have been known and may have been used, but if the order was a very much later development, the prospects of such influence would be reduced. We can only say that the order as such reveals very little evidence on the origin of the alphabet.

THE ORIGIN FROM ANCIENT SIGNS

We have thus far discovered that the prototype of the Semitic alphabet cannot be found in either the North Semitic, the South Semitic or the Greek alphabets. We must look further afield for the actual parent of these three alphabets, and having now given them thorough consideration, we will ~~now~~ proceed to examine the various theories of origin in an effort to trace them all back to a common source.

The theory that we will here discuss is largely that of Petrie, and will be found set forth by him in his memoir on "The Formation of the Alphabet."* In this small volume he has incorporated three large tables of some sixty signs found by him and others in different parts of the Mediterranean basin. The signs are in 34 columns, each representing not only different regions but, indidentally, different periods of time. The signs in the first two columns, for instance, come from early and late prehistoric Egypt. The next four columns are devoted to signs taken from the Ist, XIIth, XVIIth and XIXth Dynasties. It is not presumed that any of these signs have known values, but their forms are similar to later signs whose values we do know. For instance, A of the early prehistoric Egyptian column looks like the A of Lydia, Karia, South Spain, Thera, etc. It will, therefore, be noted that Petrie incorporates the much later alphabets in his tables and compares the earlier non-alphabetic signs with the letters

* Vol. III, Studies Series, British School of Arch. in Egypt.
Cp. Royal Tombs of the First Dynasty, Pt. I, pp. 31, 32.

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of known value, but does it on the basis of form only.

Petrie defends this procedure in the following words:

"It is always granted that there is a connection between signs or letters which have the same value and the same form; and it seems impossible to assume that when the form is the same, and the value is unknown, the forms have no connection with each other, or with the same form of known value in other lands. For instance, to look along the first line at the **A** signs, every one agrees that where it is of known value it is connected; but it would be absurd to say that in the columns where the values are yet unknown the **A** signs have no connection with those in any other column."*

It is, we hope, obvious that it would be quite impossible to reproduce all of Petrie's bulky tables here, but examples may be given. For the value a, he has found a similar sign for all the 34 columns but six. Those six are: XIXth Dynasty ostraka (which he publishes on the frontispiece), Libya, Cyprus, Runes, Sabaea, Phylakopi. It is only right to explain that for three of these he has found a sign discovered in other places which he has given the value of ai. But in the other 28 columns he has placed the following signs for the value a: (1) Early prehistoric Egypt **A**; (2) Late prehistoric Egypt **A**; (3) Ist Dynasty **∞**; (4) XIth Dynasty **Δ** **A**; (5) XVIIth Dynasty **Δ**; (6) Roman Egypt **A**; (7) Lydia **A**; (8) Lykia **A** **P**; (9) Karia **A** **Δ**; (10) North Spain **ℙ** **℞**; (11) South Spain **A** **Δ**; (12) Nabathaea **Y**; (13) Thamudite **χ**; (14) Crete **A**;

(15) Lachish \mathcal{P} ; (16) Phoenicia \mathcal{X} ; (17) Thera $\mathcal{A} \mathcal{A}$; (18) Melos \mathcal{A} ; (19) Korinth \mathcal{A} ; (20) Athens \mathcal{A} ; (21) Abu Simbel \mathcal{A} ; (22) Elis \mathcal{A} ; (23) Halikarnassos \mathcal{A} ; (24) Pelasgic Italy $\mathcal{A} \mathcal{A}$; (25) Faliscan \mathcal{A} ; (26) Etruscan $\mathcal{A} \mathcal{A}$; (27) Oscan \mathcal{N} ; (28) Latin $\mathcal{A} \mathcal{A}$;

Of this sign Petrie says: "It seems strange that two forms have existed since the 1st Dynasty, one with two equal legs, the other with only one leg; and this latter form, of the XII Dynasty, is the origin of the Greek minuscule form, which was also used in early uncials. In order to distinguish the one-legged form from \mathcal{r} in Lykia and Spain a short tail was added, a distinction which afterwards became fixed on \mathcal{r} itself. This tailed form became fully established in Italy as the Faliscan. The one-legged form was used by Phoenicia, by the early Greeks, and also in Italy. It has served as the base for the minuscule of modern times in a different construction to that which led to the Greek minuscule, not \mathcal{a} but \mathcal{a} . The type with a V-shaped cross-bar occurs as early as the XIIth dynasty and with a very deep V-bar and rounded head. In Spain it dwindled to a mere triangle."*

It will now be clear what Petrie maintains. An examination of his tables shows that 44 out of the 60 signs have their beginning in pre-historic Egypt "probably before 7000 B.C." This wide body of signs did not, therefore, develop from Egyptian hieroglyphics but antedated them by many centuries. They came into use as need for them arose. "Man is a sign-using

* p. 11.

animal," says Petrie. The snapped twig on the bush beside the trail used by the American Indian may well present the beginning of the evolution of sign-using. The personal sign of possession would soon be needed. They find their survival even today in trade and cargo marks. In fact, it is Petrie's conclusion that "signs rather than pictures are the primitive system." He argues from child life that a child will make a mark and call it a dog long before he can draw a picture of the dog. He also maintains that a child's absolute lack of a sense of direction in writing may also account for the different directions used in ancient writing. In other words, the sense of form was acquired long before the sense of direction. This might explain the tilted and reversed letters in the early alphabets.

Again it may be well to let Petrie explain his own point of view: "The point of view here presented is not that of a systematic alphabet, invented by some single tribe or individual in a developed civilization. On the contrary it appears that a wide body of signs had been gradually brought into use in primitive times for various purposes. These were interchanged by trade, and spread from land to land, until the less-known and less useful signs were ousted by those in more general acceptance. Lastly a couple of dozen signs triumphed; these became common property to a group of trading communities, while the local survivals of other forms were gradually extinguished in isolated seclusion."*

* p. 2.

This growth of signs he believes went through several stages, some of them quite violent. The use of a sign to denote property was much earlier than the use of signs in general. In prehistoric Egyptian tombs several jars are often found bearing the same mark, evidently that of the owner. The same use prevails in Egypt today. Each sign would have some kind of meaning in the owner's mind and some kind of name would be habitually associated with it. "Thus a series of apparently arbitrary signs would arise, with names attached to them."

The next development was to use that mark as a word, without regard to its meaning as a property-sign. Then the sign became a symbol for the sound rather than the sense of the sign. Next the sound became purely syllabic and finally the bare elements of sound were represented by the signs, and we have arrived at the alphabetic stage. "The alphabetic stage of the signs was probably not reached till about 1000 B.C. ... The word and syllabic stages may well cover the XIIth and XVIIth dynasties. It would be rash to assume that the shift from the original sense to the mere sound in the use of signs occurred before the beginning of the Egyptian dynasties."*

We are, therefore, considering a theory of evolution, not so much of the forms as of the meanings attached to those forms throughout the subsequent periods of man's mind. The forms themselves in the beginning of the process are more or

* op. cit. p. 5.

less identical with those finally adopted in the various alphabets. The names attached to the Semitic letters have no place in this theory because they are merely nick-names of a comparative late development. "This is shown by the earlier forms of the signs having no connection with the name, which was only applicable to the Phoenician variant."*

Rather than look upon the Phoenician alphabet as the source of all subsequent alphabets, Petrie believes that it was a "reduced form of a fuller original." He finds forms common between Arabia and the West that Phoenician does not have. Even Runic, which has been considered as derived from Latin or Greek, has signs in common with Spain, Karia, and Cyprus not known in Latin or Greek. The extra letters in the Greek are "manifestly" primitive rather than later additions. These the Phoenician had lost. All of these diversities between the alphabets lead Petrie to explain their being, as independent creations from a general widespread signary. "When we see the great diversity of the signary which underlay the whole of the alphabetic sources, it is only natural that different cities should have started with different materials." Therefore, he concludes that "a wide-spread body of signs--or signary--must have been in more or less general use, and that the shorter alphabets were selections from such a body."

In chapter viii Petrie makes an effort to determine the factors that entered into the ordering of some of these signs into a definite alphabet. For his method and conclusions

* op. cit. p. 5.

we must refer the reader to that chapter.* But he is also led to inquire into the possible geographical source of the alphabet. According to his theory, the sibilants were disregarded by those who formed this alphabet. It ought to be said that the alphabet he postulates is the Greek one plus five signs conspicuously absent from the ideal order he creates. But suffice here to say that the framers of this alphabet, which according to Petrie was the source of the later Greek and Phoenician, disregarded sibilants. That being granted, he enters into a study of the place names of Syria recorded by Thothmes III at Karnak. Out of thirty names in North Syria he can find only one which has in it an S, and only two with j. A half dozen places bounding this region on the south do contain sibilants. Therefore, the home of this alphabet was not Phoenicia but North Syria. This is likewise borne out by the Aramaean names of the letters, alpha, beta, etc. Furthermore, the later usage of indicating numerals by letters was neither a Greek nor Phoenician custom, but peculiarly Syrian. Petrie, therefore, believes that the Greek-Phoenician alphabet was systematized in North Syria, that "after the grouping of signs came the addition of the sibilants, and the omission of the less-needed signs." The names came later.

We have presented the above theory without raising a voice in protest, which does not mean, of course, that there is nothing to be said against it. Evans says that "the common

* Prof. Petrie has himself sent me a reprint from "Scientia" for December 1918 on "The Origin of the Alphabet" by himself, which, however, adds nothing new, except a few signs perhaps, to his former article we have been discussing.

'Mediterranean signary' is itself a myth, though a certain number of primitive signs naturally recur in various areas."*

This seems to be the proper attitude to take. There were, of course, signs in different places, but it is extremely hypothetical to suppose that they formed independent alphabets which in the end became so similar. Why should the sign A everywhere be adopted for the sound a? It is explainable only on the basis of a common alphabet. We believe that it must be granted that the main body of the alphabets we do know have come from some common source. Otherwise, we could not account for their similarities. The differences may be variously explained but the similarities cannot be explained apart from a common alphabet. What that alphabet was is another question. It need not be the Phoenician, which Petrie so decries! Without entering into details at this point, we need only say that Petrie's theory cannot be proved nor does it explain a fraction of the phenomena presented by this problem. Too much is assumed and too much is disregarded. Petrie has no followers.***

Another theory that disregards everything but form, although it is not Petrie's theory, by any means, is akin to it, and may well be presented here. We refer to that of Pilcher who in 1904 advocated an 'arbitrary invention' theory.** He disregarded the names entirely as unsatisfactory labels. Their meanings are either unknown or, if known, do not faithfully name the presumed object. Thus beth, "house", does not resemble a house. Therefore, the letters did not come from

* Scripta Minoa, p. 86.
 ** PSBA. 26, pp. 168-173.
 *** See our p. 108b.

pictures. On the other hand, he thinks he sees in all the forms a definite conformation to certain geometrical lines.* He thus derives the letters of the alphabet from geometric signs, and in that respect, agrees with Petrie.. But he builds his theory on an arbitrary invention, which does not seem to be Petrie's idea at all. Pilcher, furthermore, assumes a common ancestor deliberately created by combinations of lines and circles.

Since morphology, therefore, is his only real concern, he does not--in fact, he cannot--follow the order of the alphabet as we know it, but what he considers must have been the original order. The first column of the table given below is his restored alphabet, each sign of which, he maintains, is found in some inscription. (See next page.)

The first three letters consist of a vertical line with one, two, and three cross-bars respectively. Gimel, Wau, and He have the same elements with the exception that the bars do not cross the upright. Yod and Heth come from Wau and He by slight differentiation. For Wau he uses the Greek digamma which he considers very ancient, and which gave rise to yod. Kaph and Aleph are reverses. Each consist of the vertical and an angle. Lamed also has the vertical stroke with a diagonal on the lower right. In a subsequent article he explains this as an angle with prolonged stroke well above the line and makes it equivalent to the zig zag lines in \mathcal{W} and \mathcal{Y} . These

* We have already mentioned this theory somewhat in Ch. 4.

	Proto- Alphabet	Baal Lebanon 900 B.C.	Earliest Greek 800 B.C.	Zenjirli 800 B.C.	Formello 700 B.C.	Lion Weights 700 B.C.
Tau	+	+	T	X	T	+
Zain	‡	‡	I	I	‡	‡
Samech	≡	≡	≡	≡	田	≡
Gimel	7		1	1	>	1
Vau	フ		47	4	7	4
Yod	ㄣ	1	2	ㄣ	1	ㄣ
He	≡		≡	≡	≡	≡
Cheth	田	田	田	田	田	田
Caph	7	7	7	7	7	7
Aleph	K	K	A	+	A	K
Lamed	L	L	↑	∠	L	∠
Mem	ㄣ	ㄣ	ㄣ	ㄣ	ㄣ	ㄣ
Nun	7	7	7	7	7	7
Shin	W	W	3	W	E	W
Ṣade	M	7	M	W	M	7
Daleth	△	△	△	△	△	△
Resh	9	9	9	9	9	9
Beth	8	8	8	8	8	8
Ain	0	0	0	0	⊙	0
Pe	9		7	7	7	9
Koph	φ	φ	φ	φ	φ	φ
Teth	⊕	⊕	⊕	⊗	⊕	⊕

From PBSA. 26, p. 172.

Appendix to Chapter V.

What has already been said in reference to Petrie's arguments, may be applied to the recent claims of the French excavators in France. M. A. Morlet has been reporting in the French press some Neolithic finds at Glozel which he claims to be the original prototypes of the Mediterranean alphabets. Basing his arguments upon the work already done by Petrie, he has contributed with facsimiles a couple of articles to the *Mercure de France* for April 1, 1926, and December 15, 1926. The one is entitled the "Invention et diffusion de l'Alphabet néolithique," and the other the "Origine Néolithique des Alphabets Méditerranéens." A review of a popular article given in "La Nature" may be seen in the Literary Digest for September 11, 1926, which reveals the ridiculous fashion in which positive scientific facts are given out to the public!

The Neolithic origin of the alphabet is untenable on every conceivable ground. Morlet himself admits that the script at Glozel will probably never be known, and his only argument for his thesis is on the basis of form, and it^{is} inconceivable that a given form should persist down the milleniums and be adopted finally by all the peoples of the earth for a certain sound! There must be a common alphabet to begin with, and that alphabet did not just gather itself together in all parts of the Mediterranean basin!

THE SEMITIC-MESOPOTAMIAN THEORY

"Litteras semper arbitror Assyriis fuisse, sed alii apud Aegyptios a Mercurio, ut gellius, alii apud Syros repertas volunt."
 Pliny, vii, 192.

The attempt to derive the "Phoenician" alphabet from a Semitic origin has taken on two phases. With the a priori possibilities of Babylonian influence, certain scholars have considered two origins in that field: (1) The Assyrian cuneiform itself, (2) The old Babylonian.

CUNEIFORM

The first theory originated with Deeke* in 1877. More recently, as late as 1900, it has been revived, in a slightly different form, somewhat timidly by Peiser.**

It was Deeke's notion that the old Semitic alphabet was invented by "a pupil of the priestly schools of Mesopotamia." This "inventor" knew the whole system of the cursive Assyrian cuneiform in use at that time and probably some older forms besides. The alphabet was invented in Aram about the ninth century! It had its origin in the cuneiform.

For instance, aleph arose from $\gamma\gamma$, a, 'a, ha, and took on the character \star through the hieratic $||$, the little strokes of which became turned obliquely, thus, K and finally penetrated through the upright wedge, forming \star !

* Zeitschrift der Deutschen Gesellschaft, pp. 102-116.

** Mitth. d. vorderasiat. Ges., 1900, H2.

Of \beth he says, "the origin of the old Semitic form is clear. The opening at the top is secondary. The old Greek β is exactly equivalent to the old Babylonian 𒂗 ."* In other words, the syllable ba 𒂗 became β in Greek and ב in Phoenician!

Concerning Gimal, he says, "the old Semitic forms are connected either with a mixed form in which the upper hook is twisted round or the front wedge is turned down." He refers to the cuneiform 𒂗 which means gam, gu. From this was derived ג !

About the daleth he cites its similarity with the resh in the old Semitic forms, and remarks that the same similarity holds good in the cuneiform. He would, therefore, derive both from the common form 𒂗 , these three wedges arranging themselves into a triangle, which is the common Greek-Semitic basic characteristic for both letters.

Since the Assyrian had no h, the inventor of the Semitic alphabet took the nearest guttural sound ח , which is חא , חג , חי . Out of this developed ח from which it is easy to take the step to ה !

This will suffice. His complete table of comparisons is given on the next page. Deeke has had a hard time convincing many scholars of any real correspondences.** The comparisons ignore the Semitic names entirely. Many of the types are admittedly obsolete in the ninth century. The theory has little or
























* op. cit. p. 105.

** Paul Haupt wrote in 1888: "Some of the cuneiform characters bear striking resemblance to the oldest Phoenician forms... etc." John Hopkins U. Circulars No. 64. Vol. VII.

N assy. Werth.	Keilschrift					Mesa ca. 850 a.C.
	ass.=baby.=med.=arm.			kypri.	suppon. Formen	
	vulg.	Var.	hier.			
1 a a ha			||			
2 ba						
3 gam gu						
4 da ra du ru						
5 ha hig hi						
6 u ut ud						
7 zur sm						
8 had hat hud hut						
9 tip dip						
10 i si e						
11 ka						







N assy. Werth.	Keilschrift					Mesa ca. 850 a.C.
	ass.=baby.=med.=arm.			kypri.	suppon. Formen	
	vulg.	Var.	hier.			
12 la						
13 ma						
14 na						
15 su						
16 = 5						
17 par bar						
18 sal sal						
19 ki						
20. = 4.						
21 sa						
22. tar						

no support.

We have already mentioned that Peiser in more recent times (1900) came forward as a belated but cautious disciple of Deeke. He observed that , a variant of , wa, when placed on its side resembles "the oldest form of waw  ." This is not the oldest according to Lidzbarski,* but due to the absolute lack of uniformity of the letter waw on all inscriptions of all ages, no one can truly say which is the oldest form.** However, it is hard to see much resemblance to even this form of waw, and as Lidzbarski asks, why must the turning of the cuneiform be necessary? Peiser says it is necessary, but why? Another such twisting takes place in connection with  . "Aus , dem umgelegten , wird ohne weiteres  gemacht; mit welchem Recht? Es sieht doch wohl eher  gleich, aus dem nach Peiser Waw entstanden sein soll.*** From , which twisted about, is , he gets ; from  which twisted is , he gets , and from , which twisted become , he gets  . Lidzbarski is quite sarcastic, as usual, over this sort of juggling.**** He rightly asserts that , , and  are not the oldest forms, and wonders where the form  (for ) is found!

Peiser, however, thinks that the alphabet was first used among the Assyrians as a sort of shorthand and refers to the Assyrian scribes with their rolls. These reliefs given
























* Ephem. I. p. 268.

**  appears on the Mesa' inscr., and the Gezer "calendar" but , , and  also appears on the latter.  appears in Aram. and Phoen. but soon becomes . The lack of uniformity on the Gezer tablet may indicate an early date before the alphabet had become standardized.

*** Lidz. Ephem. I. p. 268.







**** But Lidz. did just this thing. See Ch. 2.

no support.

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by Layard* are dated much later than the origin of the alphabet. They truly show that another writing besides the cuneiform was in use among the Assyrians at that time, but what the script was we can only conjecture. It is a sure guess, however, that it was alphabetic at that time, for it is known that Aramaic was used in Assyria along with the cuneiform; it is not, however, safe to say that it was a shorthand of the earlier cuneiform.

While we cannot give this theory much credence, still we are ready to concede to Luckenbill** that "it would be strange indeed if this old system of writing had disappeared without leaving any traces behind it." It undoubtedly influenced the "inventor" in certain ways.

OLD BABYLONIAN

We learn from a note in "Light from the East"*** that Mordtmann was the first to suggest the old Babylonian theory. It was Hommel, however, who first made any serious attempt to establish this view. In 1888 he recorded his opinion in his "Geschichte Babyloniens und Assyriens" that the originators of the alphabet were Semitic bedouin of the Syrian desert, who in the course of their extensive wanderings about 2000 B.C., came in touch with the ancient Babylonian monuments. "Dass man auf derartige Weise seinen Namen oder sonst kurze Notizen verewigen könne, schien ihnen offenbar etwas höchst merkwürdiges und nachahmenswerthes zu sein."**** Overcome with this admiration, they inquired and

* Nineveh und seine Überreste, Fig. 21.

** AJSL. 36. p. 28.

*** p. 232.

**** p. 54.

learned the names of ideograms, and started to make letters of their own!

To support this hypothesis he picks out eight old Babylonian signs which he considers show sufficient resemblance both in form and in name to the Phoenician characters.

𒂗 alpu becomes א aleph, 'a, spiritus lenis.

𒅗 bîtu becomes ב beth, b

𒂔 gimillu becomes ג gimel, g

𒅗 or 𒅘 daltu becomes ד daleth, d

𒅗 katu, idu, hand becomes ה jod, j

𒅗 or 𒅘 nûnu, fish becomes נ nun, n

𒅗 inu, eye becomes ע 'ayin

𒅗 or 𒅘 rîšu, head becomes פ resh, r.

He further suggests that probably Babylonian syllables as well as ideograms gave origin to some of the Phoenician letters. For instance, 𒅗 mi, may have become מ mem, and 𒅗 e gave rise to ח hê. He suggests that the rest of the Phoenician letters were probably independent inventions. As to the names, the gimilu, "gift", was replaced by gamal "camel", and the unhebraic resh became rosh.

He concludes with a sentence of italicised German:

"So führt uns also alles darauf hin, dass das semitische Alphabet, welches die Mutter des griechischen, des altbaktrischen, uigurisch-mongolischen, und indischen ist, in letzter Quelle nicht von Aegypten, sondern von Babylonien stammt."*

An examination, however, of these forms and names reveal either haste or ignorance on Hommel's part, or a hyper-knowledge, which is just as significant. In the first place, Delitzsch admits a total ignorance of the symbol 𐤀 and of the name "gift." In the second place, any one knows that 𐤑 is not resh. But, as Delitzsch points out,* both qoph and resh may be a striking coincidence be compared (according to this theory) with 𐤒 . Delitzsch also takes exception to the two variants for daltu and rîšu. He himself gives in § 28 of his book what he considers to be the original Babylonian forms. He adds that Hommel has presented a very stupid way of handling the problem, and that, should it ever be proved that the Babylonian origin is the correct theory, he will have had no part in the solution!**

Before we go on to Delitzsch's theory (which he gave in 1896), let us take a brief glance at Hommel's subsequent notions on this problem. On the 29th of May, 1901 he read a paper, the contents of which are partly given by Lidzbarski in *Ephemeris I*, pp. 269-71. Hommel likens the alphabet to a great "star symphony." He connects the meaning and form of each letter with astronomical phases. 'Aleph is the symbol of the moon and also the symbol of the beginning of the year about 3000 B.C. Beth is the "station of the moon." Gimel is "a star, gamlu, (Merodach's weapon) in the ram." Daleth is the gate in the milky way between the ram and the twins.

* Schrift-system, p. 222.

** For a very uncritical survey of Hommel's theory, see Thomson, *The Samaritans*, p. 208.

Waw was originally the two twins' heads attached to one neck. Zai, H, is the twin dragons, the vulture and lion dragons. Hê 𐎶𐎵, Arabic hî'at, hai'at, is the "starry heaven or constellation". Jod "(arm with hand), Arabic jad al-'aqrab and jad al-gauzâ, and the moon-station ađ-đirâ'." Kaph (hollow hand) Cp. Arab. star name kaff. Lamed, (Star, "Weapon of Ea." Point of ox-goad.) Mîm = water, "Aquarius" or the whole water-region in the sky. Nûn is the two fishes connected by a bond. Cp. rikis nûni. Samek, Arabic samk, is roof or firmament. 'Ain, is an eye. Cp. Arabic ain aţţaur. Pî = mouth; Rêš = head. Šin (𐎶𐎵), Urin and cp. Arab. bâla Suhail, i.e., S. urinated and down through the stars came the rain.) Taw is a cross or mark. Cp. Arab. tawwat, "hour."

All of this may seem quite unintelligible to those who are unaquainted with Chaldean astronomy, but Hommel waxes poetical over the prospect. "Zu beachten ist besonders Aleph und Bet als Ouverture, und Schin und Tau als Finale dieser grossartigen Sternsymphonie, die wie eine Sphärenmusik aus uralter Vorzeit noch jetzt beim Hersagen des Alphabets an unser Ohr klingt sobald unsere Sinne nur richtig dazu gestimmt sind, sie zu verstehen."*

Lidzbarski remarks: "Meine Sinne sind leider nicht richtig dazu gestimmt, und ich verstehe sie nicht!" At any rate, we are indebted to Hommel for furnishing us a good laugh in the midst of some hard study.

However, the discovery that he claims to have made




























* p. 271.

on the 14th and 15th of June, 1901, proves to be as old as Noah! In 1843 Seyffarth announced: "Unser Alphabet, ein Abbild des Thierkreises mit der Constellation der seven Planeten am 7 Sept. 3446 v. Chr., angeblich zu Ende der Sündfluth, wahrscheinlich nach eigenen Beobachtungen Noah's."*


We now return to the theory of Delitzsch propounded in 1896. It was his idea that both Egypt and Babylon influenced the making of the alphabet. He said: "It is quite possible that the Canaanite consonantal writing arose both from the Egyptian and Babylonian writing, and is an extremely clever conjunction of the merits of both of them."** He claimed that the principle of acrophony was adopted from the Egyptians, as illustrated by the picture of a lion, "loboi" for the consonant l, or the sign for hand, "tot" for the consonant t, etc. Thus the Semites were led to use the picture of a house, "beth" for b, of a door, "daleth" for d, etc. But from the Babylonians they learned to express objects and ideas graphically by means of simple and suggestive rather than by exhaustive symbols. They were also influenced by the Babylonians in the choice of these objects. Among the 45 or 50 Babylonian signs that Delitzsch regards as original he is able so he thinks, to pick out some 16 that represent objects or ideas pictured by as many of the Phoenician letters. They are given on the top of the next page.

* See Lidz. Ephem. I, p. 271.

** op. cit. p. 225.

	ox	--aleph	
	house	--beth	
	camel hump	--gimel	
	door	--daleth	
	narrow	--waw	
	circumference	--heth	
	hand with arm	--jod	
	hand	--kaph	
	water	--mem	
	fish	--nun	
	eye	--'ajin	
	mouth	--pe	
	fisherman's net or hook	--šade	
		--resh	
	head		
	cross	--cross	

To these he would add the symbol for "goad", lambled, which is used as a tool for guiding beasts. For "tooth," šin, the Babylonians used the symbol for "mouth." Delitzsch therefore concludes that the Babylonian original system lacked only five of the Phoenician symbols, i.e. samech "support," he, zain, teth and qoph, the names of which are meaningless in Semitic.* But Evans says: "Omitting Phoenician letters now generally regarded as of uncertain meaning, Delitzsch's number of correspondences is reduced from fifteen to eleven or twelve.**"

* In a note he asserts that Arabic derivation of Qoph from , "back of head", is far less justified than the Babylonian kuppū "bird cage."

** Scripta Minoa, p. 83.












Delitzsch goes on to argue that the names of the symbols especially seem to be greatly influenced by the Babylonian. He says that of all the Semitic languages, except the Babylonian, it is only the Canaanite that contains aleph, daleth, and waw. "On the other hand, the Canaanite element of the Phoenician names bears unmistakable Babylonian traces: hêtu (𐤠𐤏𐤕) "circumference" has only been found till now in Babylonian; nûnu, "fish" is Babylonian (in Hebrew "fish" = 𐤒𐤍); rêšu is the Babylonian word for "head"; the final vowel i of šîn calls to mind šîn, šinnu, "tooth;" and the "monothongizing" of ai in bêth, 𐤁𐤏, and mêm, 𐤌𐤍, is one of the common Babylonian phonetic laws."*





It is not, of course, so remarkable that the letter names should refer to 16 (or even 11) common objects used by the Babylonians, for as Evans points out, "such obvious selections indeed are common to all primitive systems of writing, and are no more specifically Babylonian than they are Egyptian or Hittite, Chinese or Mexican."** But the distinctly Babylonian aspect of certain letter-names is a good argument and is not to be blinked out of court. It may be true, as Evans again says, that the fact can be explained by the widespread use of Babylonian during the Tell el-Amarna period, but this does not explain away the fact.





On the other hand, Delitzsch is treading dangerous

* p. 228.

** op. cit. p. 83.

ground when he deals with forms. He asks the question: Can the Phoenicians independently have fallen on the idea of representing an ox by the head only?  can look only like an ox head when you look at . But the Cretan script possesses an ox head also, and undoubtedly a whole ox is meant thereby.* Lidzbarski quotes Sethe as saying in a personal letter: "Es sei noch hinzugefügt, dass der Ochsenkopf für Ochs  gerade altägyptisch ist. In den alten Pyramidentexten steht oft (und in den Opferformeln immer)  für das spätere  desgl  für  (gaus),  für  (Mann),  für  (schlagen) u.s.w."

Delitzsch also tries to make capital of the fact that a "hand" and "an arm with a hand" is distinguished in Babylonian as well as in the Phoenician alphabet. ( =  and  = ). But this is also true in Egyptian.

He says that the Babylonian original mark  meant "bend," "stoop," "bow down" (Sumerian gam, symbol-name gammu) and came to be used as the ideogram for "camel knees;" that it is just as identical with gimel  as the Babylonian X, meaning "distinction", is with the Phoenician X, tau, "cross." Lidzbarski remarks that  was the oldest form of gimel and that it only afterward became  .**

The primary difficulty in Delitzsch's theory is the necessity for going back 2000 years into antiquity to get the pictures from which the Phoenician letters were derived. The

* See our next chapter.

** Ephem. I. p. 131.

cuneiform was in use at the time the alphabet was created. But as we have seen, it could not possibly have sprung from the cuneiform.* As Lidzbarski claims, it would have been only the scholars of 1500-1000 B.C., who could have possibly known the old Babylonian forms ~~forms~~ of 2000 years before, and it is quite difficult to imagine the invention of a new alphabet among the priestly and wealthy class of Babylonia.

The year before, H. Winckler had devoted a page or two in his "Geschichte Israels"*** to the alphabetic problem, and had made the sweeping statement that "only in Babylon could the alphabet have arisen." He said also: "das Babylonische hat ebenfalls kein Zeichen für das seinem Lautbestand verloren gegangene 'ajin. In der Buchstabenschrift wird dieses durch die einfache Form eines Kreises ausgedrückt. Ebenso fehlt dem Babylonischen ursprünglich ein Zeichen für thet-- das Alphabet zeigt aber eben die für 'ajin neu erfundene Form des Kreises mit eingeschriebenem tau hierfür." This, he says, might also indicate that the home of the writing was Babylonia! What sort of argument is this? Because 'ajin is a circle is no reason why it was not in the original alphabet. As Bevan*** states, "the circular form of 'Ayin may be expressed by the obvious supposition that it is meant to represent an 'eye' (Heb. 'ayin), precisely as every other letter seems to have been originally a rude portrait of some well-known object, the name of which happened to begin with the sound intended."

* Yet Lidzbarski thinks that had the Semite known of such cuneiform where the vowels are so apparent, he would have seen its advantage and used it. Ephem.I. 130.
 ** PP. 125-26.
 *** "Writing" in Ency. Bibl. iv.






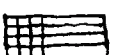
Brugsch* also was of the same opinion.









It was in 1896 also that Zimmern arrived at the same practical conclusion as Delitzsch, namely, that Babylon supplied the basis of the words of the alphabet, in an order already determined, while Egypt furnished the principle of acrophany. Zimmern's observations had little to do with forms, however, and he even admitted that he was unable to put a very high value on Delitzsch's observation: namely, that of the 22 alphabetic characters, no fewer than 15 of them were of objects named in the Babylonian. It would only be natural that the same ideas should be used. But Zimmern arrived at his own conclusion on another basis which we have already discussed in chapter IV. We merely repeat here that he considered it "probable that the inventor built independently on a basis taken from Babylon."**

There seems to be little agreement as to details among the advocates of the old Babylonian theory. In 1893 Ball wrote an article in P.B.A.S. XV. pp. 392-408, in which he upheld this theory. Again in 1899 he incorporated the same line of argument, somewhat abridged, in his book "Light from the East." He dedicated his book to his friend, Fritz Hommel, but did not hesitate to disagree with him on this question. He says, for instance: "It will, I think, be generally recognized that *Š* bêt is sufficiently like *𐎶* ba, bi, to split (Accadian bad, bid = Chinese pit). The Babylonian character

* Sammlung Gemeinwissenschaftlicher Vorträge, series III. no. 64, Berlin 1868.

** ZDMG. 50, 1896, p. 670.

for the eye is very similar, viz., , bad (baġ, maġ, and other values), because the eye is a slit or opening ( bad, to open) in the face. The difference of shape between the Babylonian sign and the Phoenician  is merely a variation for convenience of writing. The latter may be called a one-strong adaptation of the former. As to the name, beth, b-t (Semitic Babylonian bīt, bēt) is the common Semitic term for house. The original sound of the symbol becomes its name in the Phoenician alphabet; the original meaning is naturally exchanged for a familiar Semitic one which happens to be that of the corresponding Semitic sound.* It will be remembered that Hommel's prototype for  was  bītu, and that of Delitzsch was  'house!.

Ball does not restrict himself to the comparison of only one Babylonian form, but suggests several for each letter. He thinks that many of the letters arose from the common element in the several phonetic equivalents. For instance, he thinks that the letter  shin, sin,  "looks like a sort of abstraction from various Babylonian characters denoting growth and vegetation." Such are  syn, sim, sing, "garlick" (Assyrian shūmu);  sar, shar (and shag? cp. the name ni-sigū, and sig, "green"), greens, to come out, grow up, etc.;  she, shag, corn;  esh, sin (from san; cp. Sanherib. The moon waxes and wanes);  shin, lord (5 R. 30. 38a). It is possible to compare also the old Chinese  sak, tsák, now tsáu, grass, which is from shar (sar, sag, sig); and the

* op. cit. pp. 397-98.

Egyptian LLL she, a bed of water plants, hieratic \mathcal{L} ; and the Cypriote μ , ψ , se.

Ball attempts also to show that the Accadian sounds were retained with the substitution of Semitic meanings. Says he "the principle of attaching a native sense to sounds of foreign origin is too universal to require illustration." Thus the sound and form are retained but not the original meaning. This was true of beth. It is also true of gimel. In this case, however, the more original name is the Greek "gamma," because the Babylonian form was γ , the linear equivalent of γ gam, gamma, to bow, bend, curve (Assyrian qadādu). Cp. Arabic gīnu. The "gamma" pronunciation comes, of course, by analogy. Cp. DUG, DUGGA; IL, ILLA; etc. Hence, the Greek. But the Hebrew "gimel" is a modification, meaning "camel", and Ball explains it from γ γ gam-mal, "camel" or more correctly "the humped."

The common source of zain and šādē is, according to Ball, a flowering reed, zi, zidda (=zida). Since, in old Babylonian there is no differentiation of the sounds z and tz (š, ss, ç, ts), the two West Semitic sounds were represented by parts of this "reed"--the upper part for zain γ and the lower part for šādē γ . Here again the Greek name $z\eta\tau\alpha$ is compared to zīda (Assyrian zītu). The zain, on the other hand, is modern, for in Syriac we find γ and γ , zai. We shall return to many of Ball's conjectures on the names, and have already taken them into consideration in chapter III.

The late Dr. Burney goes on record in his commentary on Judges as favoring the Babylonian theory. "If the names $\alpha \eta \tau \alpha$, $\Gamma \alpha \mu \mu \alpha$ really find their origin not in West Semitic, but in Sumerio-Akkadian, the linear Babylonian theory of the alphabet may well be regarded to be as good as proved."* However, lest this appear to be too strong, we will do Burney justice by quoting him further to the effect that "In favour of this theory many attractive arguments have been adduced, though in the present state of our knowledge these cannot be claimed actually to amount to a demonstration."** Nevertheless, this is Burney's theory and in his commentary on Judges (which is more than a commentary) he suggests that the fact that the Persians utilized the cuneiform script for alphabetic purposes, further upholds the probability of this theory.***

What Burney says about the actual "demonstration" is quite true. Attractive as the theory may be, it is not proven by any means. Certain features do seem to point that way, while other elements interfere with a complete demonstration. This is true of most of the theories we have already discussed or will yet discuss. Yet we do feel that this theory, while probably untenable on account of the very early date of the old Babylonian prototypes, has much to be said in its favor. We have demonstrated this much at least--that Assyrian influence was at play on the origin of the alphabet.

It will hardly be necessary to give the details of Ball's and Burney's comparisons further than to reproduce the former's table on the next page.

* op. cit. p. 262 n.

** p. 262

*** p. 262 n.

Babylonian Modern	Babylonian Archaic	Phoenician (Mesha, ETC.) and OLD ARAMEAN (Pahamu)	Babylonian Names and Sounds	Semitic Names
			hal (āl āl), to flow; running water	al-p
			ba(t), bit(t), slit	bāt
			gam, bend, bow	gīmel
			ku(h), gush, bright ge, ear	dal-t
			da, make, dal shine, DALLU	
			(h)e, é house	hē
			wu, wood, rod, etc., we, voice, cry	wāw
			zu, (si), zida, ZITU (reed) straight see šādē	zai, zai-n
			šūd, hyt, stylus	hēt
			te, letters; te round (?), knee; tip, enclosure; (see ain tau)	tē-t
			id, (ud) yd, hand	yōd, yūd
			gub, kap, left hand KABRU; Kal p), a measure, cab	kaph

Taken from "Light from the East" p. 232.

			lam, to plant, plough(?)	lam-d
			la, laġ (lang = lam), lal	
			mu, to grow; me, ears	mē-m
			nu(h); num (Gudea B. 5 28), to sprout	hūh
			sam, herbage, sil (= sin = sah) great; sit, ditch	sam-k
			en (gam, ġen) eye; ga, gi; ġa(n), fish	ain, ghain Syr. é
			pe, ears; pur, pu, pit	pē
			si (zi), zitv; see sain	šādē
			ku(p), gu(b); kv	kōph
			ra; riš, head	rēsh
			sig, san, herbage; she, shēg, (sheng), corn	shīn
			tab, (tar), total, all, dab, tab, dib tib, etc. (see tet)	tau

THE CRETAN THEORY

It is the opinion of Sir Arthur Evans that the pre-Phoenician scripts of Crete discovered largely by himself in the first years of our century furnish the true source of the "Phoenician" alphabet. These scripts have been ascertained for the most part from clay tablets found in the archives of a remarkable palace at Knossos on the Island of Crete. In this place Evans found 2000 or more elongated clay tablets presenting three types of script. The first type is a pictorial conventionalized script resembling Egyptian hieroglyphics. The second and third types present linear characters of different periods of time. The three types are said to cover an approximate period from "the beginnings of the Middle Kingdom in Egypt" to about the twelfth century B.C. Evans divides this period into the First, Second, and Third Middle Minoan, and the First, Second and Third Late Minoan. Without our entering into his discussion of chronology, he concludes that the "Middle Minoan Age" ended about 1600 B.C. i.e., co-terminous with the Hyksos conquest of Egypt. The Palace at Knossos was at this time completely destroyed by some great conflagration. Subsequently rebuilt, the Palace was again destroyed which marks the end of Evans' "Second Late Minoan" period, about the beginning of the fourteenth century. The "Third Late Minoan" period presents the decline of the great civilization of prehistoric Crete, which culminated in the great upheaval of the 12th century.

In the First Middle Minoan period "traces of a developed form of script was found on the Palace site," which showed evidence of hieroglyphic writing. "A more important find of clay archives and sealings in the most fully developed hieroglyphic style took place in the West Wing of the Palace." This was dated in the "Second Middle Minoan Age"-- a period of ceramic polychromy par excellence, and corresponding to the Twelfth Egyptian Dynasty. Most of the contents, however, of this West Wing seem to belong to the ensuing period, which was probably a long one. Then came the catastrophe.

"An important result," says Evans, "of the catastrophe which closed the Middle Minoan phase of the building at Knossos was to supply the earliest landmark of a new and more advanced method of writing, In several of the deposits which owed their final closing to the overthrow in question there occurred, together with other relics illustrating the most advanced phase of the Third Middle Minoan style, tablets and other inscribed objects, presenting a form of linear script."* This script he calls Class A, and it would thus have its beginning about 1600 B.C. As far as Knossos is concerned the Class A script appears only in this particular stratum, but other finds in the island would indicate a longer local survival.

The second type of linear script that Evans calls Class B, occurs immediately upon the advent of the Late Minoan Age. "In deposits clearly belonging to the remodelled building the inscribed documents all belonged to Class B."**

* Scripta Minoa, I, p. 28.

** id. p. 31.

"To this class belong the great bulk of the deposits of clay tablets found in the rooms and magazines of the building, and they represent the form of script in use at the time of its final catastrophe, about the close of the 15th or the early part of the 14th century B.C."* Evans thinks that it "is possible, that this script was already in existence in the earlier half of the 15th century before our era."** Although this script has been found, only on the Palace site at Knossos, there seems to be intermediate scripts between the two classes at Phaestos and Hagia Triada. Be that as it may, Evans does not think that the later script is merely an evolution from the earlier. Because Class B sometimes shows the more primitive forms and indeed has certain forms not found in Class A, he concludes that the two types were parallel to each other. On the other hand, Class B shows "a smaller selection of characters and a less complicated system of compound signs." But Evans believes that the introduction of Class B at Knossos "may have been the result of a dynastic revolution" which had no material affect upon Minoan culture.***

We prefer to quote Evans at length concerning the nature of this linear writing: "It may be said that the whole physiognomy of this linear script attests a very considerable advance in the Art of Writing. The characters themselves have a European aspect. They are of upright habit and a simple and definite outline, which throws into sharp relief the cumbersome and obscure cuneiform system of Babylonia. Although not

* op. cit. p. 38

** id. p. 38

*** id. pp. 38-39.

so cursive in form as the Hieratic or Demotic types of Egyptian writing, there is here a much more limited selection of types. It would seem that the characters stood for syllables or even letters, though they could in most cases be also used as words. Many are obviously compounds, and certain allied groups of signs show a regular systematic variation which betrays the hand of an official grammarian. The sinuous and boustrophedon arrangement visible in the hieroglyphic class of the Minoan inscriptions is here abandoned, and the writing is regularly from left to right. Moreover, the spaces and lines between the words, the espacement into distinct paragraphs, and the variation in the size of the characters on the same tablet, according to the relative importance of the text, show a striving after clearness and method."*

This period from 1600 to 1400 B.C., therefore, represents at Crete a real revival of interest in writing, controlled evidently by the royal scribes. However, as we have seen, there was not a completely centralized system. The high state of civilization did not evidently seek to develop a unity of expression but certainly stimulated a new interest in writing methods. Hence, we have in Crete itself evidences of different types of this same effort after better expression.

Not only in Crete, but in Greece and Cyprus there seems to have been a revival of interest in writing in the Late Minoan Age. It is part of Evans' theory that the Minoan

* op. cit. pp. 39-40.

type of civilization was planted on the mainland as well as at Crete, and that the art of writing, introduced by Crete, existed there. He cites the 'stirrup-vase' found at Orchomenos presenting four linear signs, which he compares with the Cretan signs;* also two plain clay amphoras on the handle of which are three linear signs resembling the Cretan script. They were found in the Lower Town of Mycenae. Thus Evans remarks: "We have here, therefore, the evidence, scanty as yet, it is true, but highly significant, of the existence at Mycenae itself and perhaps in Attica during the latest Minoan and Mycenaean period of a system of script which fits on to a Cretan signary of distinctly earlier date. These inscriptions, therefore, seem to have been engraved in Greece proper and not to have been imported from any contemporary Cretan centre."**

This kindred stock on the mainland became in due time largely Hellenized by the Arcadians. The two elements were later assimilated by the Achaean conquerors, probably from northern Greece. Evans remarks: "How large a part of the 'Mycenaean' civilization they themselves took over from the earlier inhabitants is sufficiently proved by the living record preserved to us in the Homeric poems."*** The Tale of Troy seems to be an echo of an expansive movement of the Achaeans. The Akaiuasha who invaded Egypt in the fifth year of Rameses III (c. 1197 B.C.) are undoubtedly the Achaeans.

But it is Evans' contention that "the colonizing

* op. cit. p. 57. ** id. p. 58. *** id. p. 60.

movement from the Aegean shores, one of the principal radiating points of which was Minoan Crete, began at a considerably earlier date."* He argues that there is abundant evidence in Anatolia, Cyprus, Canaan, Egypt, Sicily, and Spain to prove the widespread contact of the ancient Minoan world.

Not only did the Minoan civilization introduce or develop a similar system of writing to that of its own in Anatolia, but it seems to be true in Cyprus. A comparison of many objects found at Cyprus with the Cretan culture reveals an early interchange. Not only that, but Evans claims that there are widespread indications of an Aegean and Cretan settlement there in the middle of the Late Minoan Period. "The handle and fragments of the fine bronze cauldron of the Cesnola Collection, with its reliefs of running bulls and lion-headed demons pouring libations, compares both in style and subject with the best work of the later Palace at Knossos."** He mentions also a lentoid bead-seal and the "wholesale intrusion of new ceramic types of finer fabric, which in their paste, glaze, and decoration are inseparable from the Late Minoan Mycenaean class." He calls attention to a Cypro-Minoan Art which is already fully developed in the 14th century.

The question that interests us mostly is whether or not these Cretans brought into Cyprus their Minoan script. Evans probably proves that they did by his comparison with that script of the linear signs found on three clay balls which were found in a typical Cypro-Mycenaean tomb at Enkomi or Old

* op. cit. p. 61.

** id. p. 69.



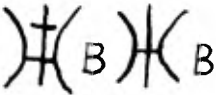





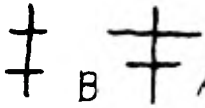


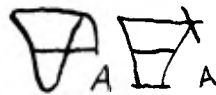



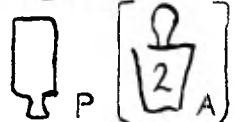

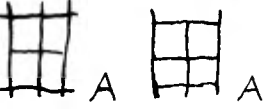


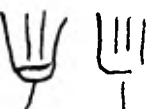





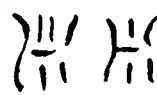
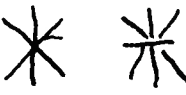
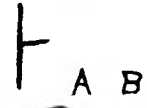




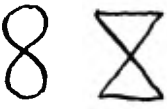






Salamis. The tomb dates from the 14th century.* The signs do not exactly conform to the Knossos script, nor do they belong to the ordinary syllabary found among the later Greek-speaking inhabitants, but they furnish a probable intermediary signary which Evans compares and which we give on the next page.

It is only fair at this point to register Jensen's protest. He says: "Wie wir früher sahen, die kyprische Schrift durch Zwischenstufen mit der altkretischen zusammenhängen wird, so scheint uns ein Vergleich der Zeichen solange unzulässig zu sein, als jene älteren Vorstufen nicht klar vorliegen."** But compare page 85 where he admits the undoubted connection between the three scripts.

We can see no reason why there was not at this period just such a Cretan influence in Cyprus. Nor is there any great doubt cast upon the probability of the Cretan origin of the Cyprus syllabary. It is true that we find this syllabary in use at a later time. Still it must have been very old at the time the Phoenicians introduced their alphabet into the island or the people would have given it up and adopted the easier alphabet. It must be remembered that the Baal Lebanon inscription, dated probably in the tenth century, came from Cyprus. So, as Evans points out, (p. 73) these Greek-speaking people of Cyprus who were using the "Cyprus Syllabary" were doing so in preference to the Phoenician alphabet or even of the alphabet of their native land. This would indicate, first,

* See Evans, Jour. of the Anthr. Inst., Vol. xxx. pp. 199ff.

** Geschichte der Schrift, p. 104.

	CHARACTERS OF THE MINOAN SCRIPTS OF CRETE	CYPRO MINOAN CHARACTERS ON BALLS AND RING	SIGNS OF THE LATER CYPRIOTE SYLLABARY WITH VALUES
1.	 P A.B.	 R.	
2	 B		 = A
3	 A A B		 = S
4	 B A		 = PA
5	 A		
6	 P		
7	 P A		
8	 A		
9	 A B		 = KE
10	 A B		 = LO
11	 A B		 = E
12	 A B		 = TA
13	 A		 = LE
14	 A B		 = NA
15	 A		 = KO

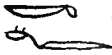





the antiquity of the syllabary, and second, the fact that these Greeks must have left Greece before the introduction of the alphabet there. If then, we are right in assuming that the Phoenician alphabet must have been introduced into Greece before the 10th century, then we are safe in concluding that the Cyprus Syllabary was in existence before that time. We have already found a script of the 14th century that resembles it on the one hand, and the Cretan linear script of the 15th and 16th centuries on the other. Undoubtedly, there is some vital relationship between the scripts of Crete, Cyprus and the Anatolian coast lands.

But Evans is not content to stop here. He would maintain that the Cretan script found its way about the beginning of the twelfth century to the south-eastern corner of the Mediterranean and there gave birth to the so-called Phoenician alphabet. He says: "The participation of a large Cretan contingent in the Philistine conquests of Southern Canaan is well ascertained. Among the leading members of the confederacy are the Cherethim, who appear as Κρηταις in the Septuagint (Zeph. ii 5; Ezra xxv. 16), and even by a not unnatural ethnographical anachronism, as Έλληνες . We read of these as holding the Southern district towards the Egyptian border, while the kindred Purasati or Pulasati, ----were their northern neighbors."* Evans then continues to point out reasons why Gaza would be a likely place for the origin of the alphabet.

* Scripta Minoa, p. 77. In a footnote he refers to W. Max Müller, *Asien und Europa*, pp. 387ff., and adds: "These two tribes are the Kreti and Plethi of David's body-guard."

First of all, it is the cross roads of trade between the Nile, South Arabia, Syria, and the Sea. Secondly, it is the traditional foundation of Minos and his brethren, and in later times bore the title of Minoa. "Its chief God Marnas, 'the Lord,' was identified with Zeus Krêtagenês." Third, it was in the hands of Cherethim who were undoubtedly settlers from Crete, who in all probability brought their script with them.

He then shows the connection of the Philistines with Crete. "New and striking evidence has lately come to light in favour of the identification of the 'Isle of Kaphtor,' the original seat of the Philistines, with the Keftô of Egyptian records, the Aegean home of the Keftiu. The most typical of the Philistine personal names, Achish, the Septuagint Ἀχίους, is twice repeated, under the form Akashou, in an 18th Dynasty Egyptian list which gives Keftiu names for the purposes of a school exercise. That the Keftiu themselves, such as we see ~~them~~ bearing tributary offerings to the officers of Thothmes III, are the characteristic representatives of Late Minoan culture, is no longer open to doubt. The fashions of their dress and hair, the offerings that they bear, the stately vases, the ingots and ox-heads of precious metal, reproduce the types in vogue in the latest Palace period at Knossus."*

Thus it appears that the Kaphtor of the Old Testament (see Amos 9:7; Jer. 47:4; Deut. 2:23) is identical with the Keftiu of the Egyptian records (  ) k-f-tîu, sometimes k-f-ty-w (  ). Macalister** treats the

* op. cit. p. 78.

** The Philistines, pp. 7-11.

question even in more detail than Evans does, and ends up by remarking that the latter's excavations at Crete have turned "the probability into as near a certainty as it is at present possible to attain."* At the end of Chapter I of his lectures on The Philistines, Macalister says: "The conclusion indicated therefore is that the Philistines were a people composed of several septs, derived from Crete and the southwest corner of Asia Minor. Their civilization, probably, was derived from Crete, and though there was a large Carian element in their composition, they may fairly be said to have been the people who imported with them to Palestine the memories and traditions of the great days of Minos."

As to the date of the Philistine invasion, Evans places it at the close of the 13th century. Müller puts it, perhaps, as early as any scholar, namely 1220 B.C.** Macalister dates it on the information of the Wenamon expedition of 1110 B.C. somewhere near 1200 B.C.

Evans and his followers, therefore, assume that some-time after this period the Semitic letters had their origin among the Philistines. It need hardly be mentioned that the date is entirely too late. The "Phoenician" alphabet was already in existence in the latter half of the 13th century. And if we concede that there was a somewhat earlier peaceful penetration of the Philistines before their actual "invasion," even then the time element would be a serious stumbling block. The Aḥîrâm inscription completely puts at rest this theory and shoves the origin of the alphabet farther back into antiquity.

* op. cit. p. 10; for rival views, see pp. 11-13.

** Mitth. d. vorderasiat. Ges. 1900, p. 34. See Scripta, p. 78.

*** Scripta p. 11

But this is not the only objection to the theory. In the first place, the comparisons are made to the three scripts. It does not seem possible to find equivalents for all the 22 Semitic characters in any one of the Cretan scripts. Nor are the comparisons that are made taken always from all three scripts. For instance, the "bent human leg" that is compared to gimel is found only in the hieroglyphs. The same can be said of Aleph, etc. Then again, some of the letters, like the Phoenician mem, are not to be found in any of the scripts. Therefore, in the next place, it is necessary to postulate a local variety of the Cretan script peculiar to Philistines, which may very well have existed, but no trace of which has yet been found. In the third place, it is necessary to assume, on the theory of acrophony, that the Cretan signs are ideograms and not syllables or even letters. Of course, the sign might be adopted and called "house" by the Semites because it looked to them like a house rather than the fact that it actually meant "house" in the Cretan language. But that would not be Evans' theory, and would not account for his idea of the unintelligible letter-names. He says: "A Minoan sign, for instance, might represent the full native word for 'house' or 'hand', or a part of such a word. The word-sign could be adopted in a translated form as bêth or kaph, the phonetic value of which was, however, reduced to a mere b or k by the new and advanced method of Phoenician acrophony. On the other hand, it looks as if names such as têth and koph were literally taken over from the original tongue--ex hypothesi that of the Philistine colonists."*

* Scripta, p. 94.


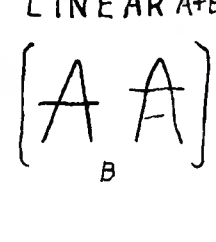

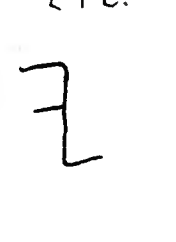
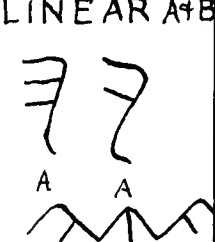


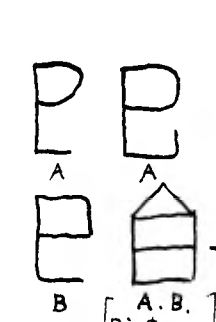
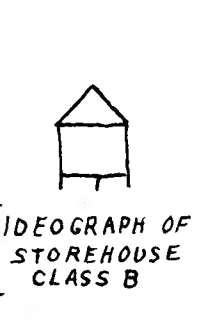

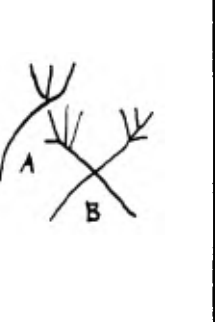

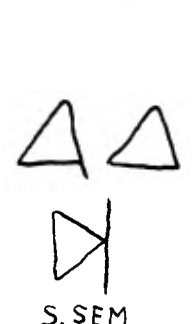
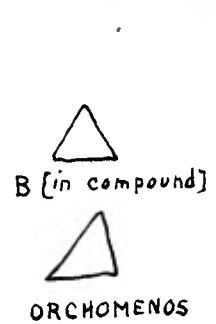

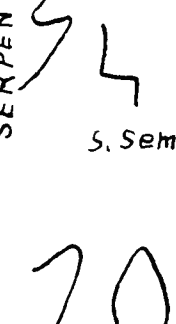
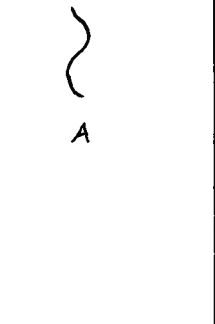
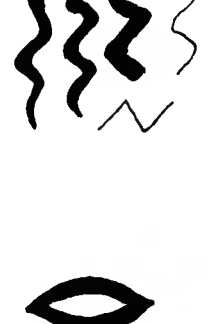
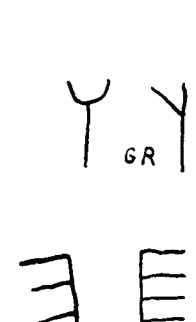
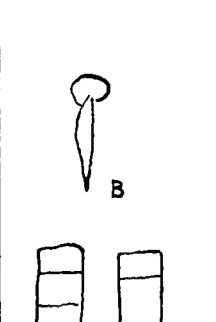
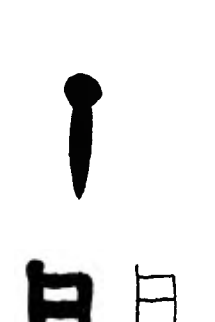

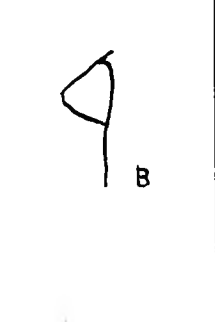


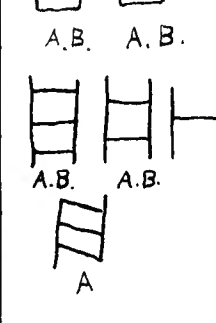

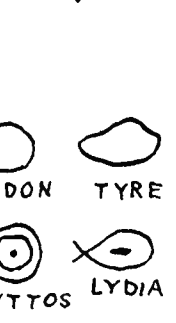
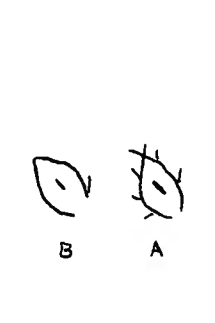
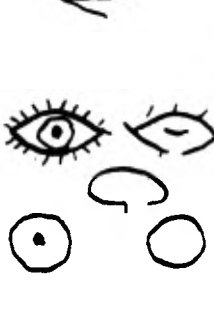

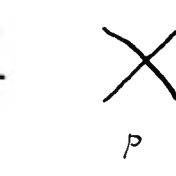
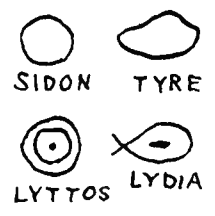
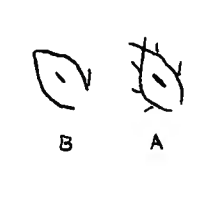
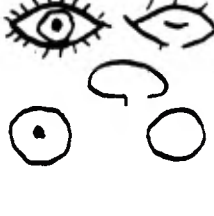
In the fourth place, neither Evans nor anyone else has been able to test his theory in the slightest degree. Although Dussaud thinks the comparisons favorable, he also voices this view. He says: "Il est certain que la comparaison des lettres phéniciennes les plus anciennes avec les caractères linéaires crétois est favorable à l'hypothèse; mais, pour que la démonstration soit complète, il reste à prouver que les signes du linéaire crétois ont même valeur que les lettres phéniciennes de même forme." * The Cretan language is yet undeciphered. Even if we pick out a form that looks like a house and compare it with the Semitic Beth "house" 𐤁, we have no way of knowing that it actually means "house" in the original language. On the other hand, we do know the Egyptian ideogram for house! Naville, (who follows Evans), is, moreover, entirely too emphatic when he says: "The comparison between the Phoenician and Minoan scripts shows particularly striking points of similarity, and we may say that the question of the origin of the Phoenician alphabet is solved." ** It is far from being solved! No one theory seems to meet the whole situation. ***

As for the similarities that are so striking, we merely reproduce them for the reader's inspection and judgment. See the next page.

* Les Civ. Préhelléniques, p. 434.

** The Text of the O.T., 1915, p. 47.

*** Lehmann-Haupt (ZDMG. 73, 1919, pp. 51-79) agrees with Sethe that the internal features of the Phoenician alphabet--vowellessness and acrophony--came from Egypt, but thinks that the external forms were eclectically chosen from Crete without bothering about phonetic values.

ALEPH [ALPHA] = "OX"	PHOENICIAN ETC.	CRETAN LINEAR A+B	CRETAN HIEROGLYPHS	PHOENICIAN ETC.	CRETAN LINEAR A+B	CRETAN HIEROGLYPHS
						
BETH [BETA] = "HOUSE"						
DALETH [DELTA] = "DOOR"						
VAU [F. Y.] = "TENT PEG"						
CHETH [H] = "FENCE" [HÊ]						
TAU = "MARK"						
						

in the course of supplementary excavations beneath some Hellenic constructions at the north-eastern extremity of the Phaestian acropolis, brought to light a chamber in which, amongst various objects, illustrating the concluding phase of the Middle Minoan Period, was a clay disk covered on both sides with a hieroglyphic inscription larger than any yet discovered."*



The nature of the disk can be observed from the above reproduction of Face I. It is 6.67 inches in diameter. The inscriptions evidently coil around from the center to the circumference. The signs are grouped in regular rectangular spaces and they have been stamped in the soft clay either

* op. cit. p. 22. A very good reproduction of the disk is also given by Evans, pp. 280 and 282; we use that of Macalister, pp. 84-85.

individually or as a whole. Macalister remarks: "I suppose it is the oldest example of printing with movable types in the world."* There are 61 of these groups altogether, and 241 individual signs. The groups are composed of from two to seven characters each. Macalister makes out 45 different characters and suggests that "from the largeness of this number we have to deal with a syllabary rather than an alphabet."

While Macalister concedes that this particular script is a syllabary, he advances the theory that the script of which this is yet the sole representative may furnish us with the origin of the "Phoenician" alphabet. "It is not unreasonable to suppose that in process of time the script of the Disk would become simplified into just such a linear script as that alphabet."** He thinks he discovers at the end of certain groups a sloping line under certain characters, and advances the theory that the mark expresses a modification of the phonetic value of the character. Since it comes always at the end of a "word", it probably means the elision of a final vowel in the last syllable. Thus Da-go-na could be written with a closed syllable, thus--Da-gon. "The mark would thus be exactly like the virāma of the Devanāgarī alphabet."*** In some such fashion, then, ka, ko, ku, represented by different symbols, lost their vowels for euphemistic or grammatical purposes, and ultimately this led to the adoption of a single symbol to represent the letter k. Thus the 45

* op. cit. p. 83

** id. p. 128

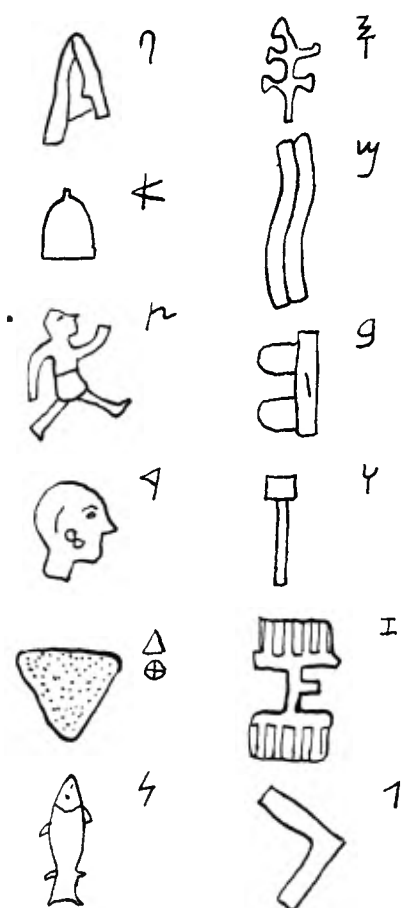
*** id. p.87

or more original characters would gradually be worn down to 22 letters such as we find in the "Phoenician" alphabet.

It will have to be granted that this is ingenious surely, but it is genius built on a very flimsy foundation. First of all, Macalister has no followers. Secondly, the Phaestos Disk stands alone as evidence. Thirdly, it would not have been possible for such a slow evolutionary process to have been completed in three or four centuries.* Fourthly, the marks seem to appear also in the middle of these groups as at the end, (see groups 6 and 23 on Face II), and even if not, Macalister does not know that these groups are words. Furthermore, his comparisons are made, of course, in total ignorance of phonetic values, and they are not especially satisfactory either.

On the evidence largely of the plumed head-dress, which Macalister regards as a personal name determinative, he connects this disk with the Philistines. This Disk, therefore, represents the Philistine script.

But there is really little reason for supposing that this particular script belonged to the Philistines any more than did the Knossos script. A



* Both Evans and Macalister agree in dating the Disk about 1600 B.C. The Aḥîrâm alphabet was fully developed in the 13th century.

close comparison of signs, to be sure, shows that they are not identical, but there can be little doubt but that the two belong to one family. Evans himself recognizes their differences but suggests that "the general character of the hieroglyphic script presents, in any case, a close parallel with the Minoan, and a certain proportion of the signs are identical."* He suggests that the disk reveals a high civilization parallel with Minoan. "Should it prove to have been the work of some neighbouring people from the Anatolian coastland, it would itself be sufficient proof that at a very early period a high civilization had grown up in that maritime region, interrelated no doubt with the Minoan but standing to it in a parallel rather than a dependent relation... Meanwhile, however, it is well to remember that the Phaestos Disk at present stands alone." Here I think we may leave the Phaestos Disk to future illumination.

Before we leave the Aegean hypothesis, we need to refer briefly to the Sinai "foreign" inscriptions found in 1905 on the peninsula of Sinai. These inscriptions find their place more readily in the discussion of the Egyptian theory and so to a later chapter we must refer the reader for a detailed statement concerning them. In anticipation, however, we will say that they are apparently a foreign alphabetic writing based on a superficial knowledge of the Egyptian hieroglyphs. At any rate, they are mixed up with hieroglyphs and the characters themselves seem to be influenced by them. They are dated from 1500 B.C. to 1800 B.C. by most scholars.

* op. cit. p. 27.

But Schneider* would overthrow these dates and argues that they do not go back much earlier than 1000 B.C. He argues a priori that the Philistines could have been in possession of the Sinai mines (where the inscriptions were found) at that time--a time when the Egyptian power had been greatly weakened. He suggests more specifically that this writing was done by a Philistine prince, who, being in the realm of Egyptian gods, was anxious to placate them, and in fact gave his inscriptions the appearance of Egyptian hieroglyphics. This would explain the votive offering to Hathor and the image of Ptah.** He admits, therefore, that the impression given by the inscriptions is a "rough imitation of Egyptian hieroglyphs." He says, however, that "Wenn die Sinaischrift nicht die ägyptisierenden ausgeführteren Bilder enthielte, sondern an deren Stelle die entsprechenden Alphabetzeichen, so wäre sie einer spätminoischen Kursive durchaus ähnlich, nach Zahl, Gestalt und Stil der Zeichen fast gleich (einige der nicht-phönikäischen Zeichen, z. B. 24, 29 die senkrechten parallelen Schlängellinien, der Fisch und das Auge u. a. sind in Kreta sicher nachweisbar.) Die Uebereinstimmung mit den kretischen Kursiven ist viel grösser, als die mit ägyptischen Zeichen:***" We will have to ask the reader to determine the truth of this statement for himself by examining the Cretan cursive already given in this chapter.

* OLZ. Nov. 1921, pp. 241-246.

** See chapter X.

*** op. cit. p. 245.

Schneider's conclusion is that the Sinai inscriptions may furnish the actual ancestor of the "Phoenician" alphabet, and if so, it was not of Egyptian origin but of Cretan.

We will again touch upon Schneider's theory when we come to discuss more fully these inscriptions, but we can say here that his suppositions are far-fetched. He does not, moreover, prove his late date, and this failing, the whole hypothesis falls through. As we see it, the only vital connection between Crete and the Sinai inscriber was one of influence. He was probably led into his experiments with the Egyptian script by reason of the corresponding experiments going on in other parts of the world, especially in the Aegean basin. But this was three or four centuries before the Philistines arrived upon the Canaanite coast.

This is probably a convenient place to give the substance of Schneider's earlier arguments on behalf of the Cretan theory.* In 1913 he maintained that the alphabetic letters could not have been independent creations but had to be borrowed, and furthermore, that they were borrowed from the Cretan pictographs. He submitted four arguments which may be found summarised by Jensen in his recent *Geschichte der Schrift*.**

First, the pictures of the Phoenician alphabet are, with but one exception, to be found in the pictorial writing

* Der kretische Ursprung des phönikischen Alphabets, Leipzig, 1913.

** p. 106.

of Crete in the second millenium. It contains the preliminary stages of the alphabet without a single gap! Second, the pictures of the alphabet, when properly interpreted, correspond exactly, both individually and as a whole, and also in their order, to the civilization of the Minoan thinkers as we have them in the monuments and myths. Third, he cites Diodorus (5, 74*) as saying that the Cretans at a late time knew that the alphabet had been invented in Crete, but adopted and changed by the Phoenicians. Fourth, the migration of nations in the second half of the second millenium B.C., thru which Southern Palestine got a Philistine population and Crete a Barbarian one, is a sufficient explanation of the disappearance of the alphabet from Crete, and the appearance in Palestine!

It is Schneider's opinion that the pattern on which the alphabet was based had no vowels, so the Phoenician remained without vowels. Also that the number of symbols and their arrangement did not change, but that their names and phonetic values did, when the pictures were translated. He says that the translator's task lay in finding 22 words for 22 pictures--22 words that began with the proper consonant. He further states that in some cases the agreement of name with picture was only approximate. Such was the symbol for 'mountain'

*

Πρὸς δὲ τοὺς λέγοντας, ὅτι Σύροι μὲν εὕρεται τῶν γραμμάτων εἰσὶ, παρὰ δὲ τούτων φοίνικες μαθόντες τοῖς Ἕλλησι παραδεδώχασιν, οὗτοι δ'εἰσὶν οἱ μετὰ Κάδμου πλεύσαντες εἰς τὴν Εὐρώπην, καὶ διὰ τοῦτα τοὺς Ἕλληνας τὰ γράμματα φοινίκεια προσαγορεύειν φασὶ τοὺς φοίνικας οὐχ ἔξ ἀρχῆς εὕρεῖν, ἀλλὰ τοὺς τύπους τῶν γραμμάτων μεταθεῖναι μόνον, καὶ τῇ τε γραφῇ ταύτῃ τοὺς πλείστους τῶν ἀνθρώπων χρῆσασθαι καὶ διὰ τοῦτο τυχεῖν τῆς προειρημένης προσηγορίας.

being called a 'shin', tooth.

We have already expressed ourselves as to the Cretan view in general and do not find anything in Schneider's propositions to cause us to change our mind.

The latest adherent to this theory is Hans Jensen, who in his new *Geschichte** remarks that the theory is worthy of more notice than Sethe had given it. Jensen does not, however, give any arguments for his adoption. In fact, he does not accept it in so many words, but hints that it, of all the theories, finds favor in his eyes. But it is very strange indeed to find a man writing in 1925 on the alphabet and not even mentioning the Ahîrâm sarcophagus inscription found in 1923! Jensen must now take account of the fact that the Moabite Stone is not the oldest "Phoenician" script we possess, as he remarks on page 114!

* p. 106.

CHAPTER VIII.

THE HITTITE-CYPRIAN ORIGIN

Partly because there are few champions of either the Hittite or Cypriote origin of the alphabet, and partly because it is actually maintained that the one has sprung from the other, we have thought it best to consider the two together.

THE CYPRUS SYLLABARY

The Cyprian syllabary was first noticed in 1850. In 1852 the Count of Luynes published an inscription at Paris.* In 1872 Hamilton Lang** and George Smith*** made a beginning at translating the script. They used a Phoenician-Cyprian bilingual (375 B.C.) and made out several Cyprian royal names. Smith interpreted 18 out of 54 signs. It was found that each character denoted either a vowel or a consonant followed by a vowel. While it was thus a syllabary, it was made up only of syllables beginning in a consonant. There were no syllables like ab, ud, etc., such as the Babylonians possessed.****

As to the origin of this syllabary scholars have differed. Brandis***** looked upon it as the first and last attempt to apply the cuneiform system to a Greek dialect. He does not maintain, however, that the separate symbols are

- * Numismatique et inscriptions cypriotes, Paris 1852.
- ** TSBA. 1872, pp. 116-28.
- *** TSBA. 1872, pp. 129-44.
- **** See M. Schmidt's articles in the Jenaer Literaturzeitung, 1874.
- ***** Monatsber. der Berliner Akademie 1873. pp. 643ff.

derived from the cuneiform. Deeke, on the other hand, considers the Cyprian writing a "perfect transformation of the new cuneiform of about the eighth century B.C."*

CYPRUS SYLLABARY					
Vokale	* (10; 14)	* (11; 12; 13)	* X	Σ (8) ⊥	Υ Λ
j	∘ ^a ja	Σ ^e je	-	-	-
v	)( * va	I ve	)(ⁱ vi	↑ (7) vo	-
r	∇ (Ω) Σ ra	Λ (⊙) Π re	∇ (7) Ψ ri	Λ (X) ro	)( ru
l	⋈ la	8 (8) ∞ le	⋈ li	+ lo	⊕ lu
m	)( X ma	X X? me	Υ (⋈) mi	⊕ (⊕) ⊖ mo	* mu
n	⊥ na	)( (11) ∇ ne	∇ ni	)( no	)( nu
Labiale	≠ pa	3 pe	∇ H pi	9 (S N) po	⋈ pu
Dentale	⊥ (⊥) ta	⋈ (⋈) te	↑ ti	F (F) Z to	⋈ (⋈) tu
Gutturale	↑ (↑) ka	)( (7) ke	⋈ ki	Λ (Λ) Λ ko	* (X) ku
s	√ Y sa	μ (4) Ψ se	⋈ F si	Σ ⊥ so	)* su
z	)( za	-	-	Σ zo	-
x	)( xa	H xe	-	-	-

Jensen's Geschichte, p. 83














If the syllabary was designed for the Greek language, it was a complete failure. As Macalister** says, the Greek words "have, indeed, to be distorted almost out of recognition

* Der Ursprung der kyprischen Silbenschrift, Strassburg 1877.
** Cambr. Anc. Hist. I. p. 143.

to be expressed in the Cypriote syllabary at all." He gives an example of an inscription discovered at Tamassus which begins with the words τὸν ἀνδριάντον τόνδε (?) ἔδωκεν. In the Cypriote characters it appears as to-na-ti-ri-a-ta-ne-to-te (?) -e-to-ke-ne. We are ready, therefore, to agree with Macalister that the syllabar was not intended for the Greek language. It was probably intended for the unknown language of the other inscriptions.

As to the origin of the characters, it has also been claimed that they come from the Hittite. Sayce did some pioneer work in that direction in 1877.* The following table shows some of his comparisons.

Perhaps, however, the real origin of the syllabary is to be found in the Cretan script. This has been made all the more probable by the discovery of the intermediate links we have already mentioned in chapter vii. These three clay balls and the ring furnish us with 15 characters that undoubtedly present a connecting link between the Minoan script and the later syllabary of the Greek-speaking colony of Cyprus. But it may truly be said that all efforts to decipher either the Cretan script

Hittite	Cyprian
	 ^{vi} (Sayce: yi)
	 ka
	 to
	 mo
	 (Sayce: ) si
	 °

Jensen, p. 84.

* TSBA. 1877, pp. 22-32.

or the Hittite hieroglyphs on the basis of the Cyprus syllabary have failed. The true origin still lacks complete demonstration.

THE HITTITE SCRIPT. The origin of the Hittite hieroglyphs, moreover, is a still greater mystery.

We know little about the race, the language, or the script. We do know, however, that there were two types of writing found among this people--the cuneiform and the hieroglyphic. The language of each is unknown. According to the conjecture of Cowley*, the cuneiform was superseded by the hieroglyphs. He bases this supposition on the fact that the cuneiform inscriptions found at Boghaz-keui date from the 13th and 14th centuries, while the hieroglyphic monuments of Carchemish, for instance, are much later. In the north and west, where the Hittite kingdom first held sway, no (or practically no) hieroglyphs have been found on the important sculptures.** We say, practically none, for what appears to be hieroglyphic signs in little monograms are found on the monuments beside personal or divine names. Cowley looks upon these as symbols such as those found on Sumerian seals, "coats of arms" as it were, possibly introduced by a conquering race. But it is only in the south and east, where the Hittites migrated sometime between the 13th and the 10th centuries, that the hieroglyphs in long texts are found on the monuments. It is also striking that very little cuneiform is found in this

* The Hittites, --Schweich Lectures, 1918.

** Only one inscription in hieroglyphs, too defaced to make certain that it is actually Hittite, has been found.

region which supposedly represents the later history of the Hatti. It is Cowley's opinion that the hieroglyphic writing was a development of the elements found in the monograms at Boghaz-keui, and suggests that it may even be alphabetic. Indeed, if he is correct in delegating this writing to the later Hittite period, and "it may reasonably be doubted whether this system of writing had been developed in the earlier period, beyond its first rudiments," we may look upon it as scarcely older than the "Phoenician" alphabet. Cowley asks, "Was it also alphabetic, or partly so? Was it one of several competing attempts to invent an alphabet, of which the 'Phoenician' survived on its merits?"* He notes also Sayce's discovery that in the Vannic inscriptions there is a tendency to change the cuneiform syllabary into an alphabet, as the Persians actually did later.

He continues: "Now, if our Hittite inscriptions began to be written about 900 B.C., and the Vannic soon after, they are not far removed from the earliest specimens of 'Phoenician' writing. (The Mesha inscription was written about 850.) It would seem then that all three developments were due to an alphabetic idea which was in the air about that time. The Hittites developed a partly alphabetic form of writing from their existing system of quasi-heraldic signs, the people of Van tried to do the same with the Assyrian cuneiform, and both failed; the originators of the 'Phoenician' alphabet

* op. cit. pp. 53-54.

developed their system from some unknown set of signs, and gained universal acceptance."*

The above was written in 1918 before the discovery of the Aḥîrâm inscription which pushes the history of the Phoenician alphabet back to the 13th century. If the Hittite hieroglyphic writing dates from 900 B.C., it would come too late to have any influence on the making of the Phoenician alphabet. In that case, the latter would be the influencing factor upon the simplification of both the Hittite and Vannic scripts. We believe, however, that the formation of the Hittite hieroglyphic script had begun much earlier. Indeed, if Langdon and Hilprecht** are correct in dating the "boss of Tarkondemos"*** at the 13th century, then we may say that the bit of writing is contemporaneous with the Aḥîrâm inscription. The 'Phoenician' alphabet was, however, perhaps the first in the field.

We will now mention the comparisons that Sayce has made with the Phoenician. In his article on the "Origin of the Phoenician Alphabet"**** he says: "As I suggested many years ago (SBA.Trans., 1876 V. p. 30) the forms of three letters, zain, yod and kaph, indicate acquaintance with the Hittite hieroglyphs. They are not only undiscoverable in other forms of hieroglyphic script, but are so peculiar as to make it difficult to believe they could have been independently evolved.






* op. cit. p. 87.

** Assyriaca, p. 114.

*** See Cowley's "Hittites" p. 49

**** PSBA 32, 1910, p. 221

The most natural way of accounting for the identity between them and the "Phoenician" picture writing is to suppose that the inventors and name-givers of the latter had seen Hittite texts." If this be true, the texts must necessarily have existed. This we do not positively know. We reproduce, however, the three comparisons (plus aleph). Concerning the aleph he says that it is the head of an ox as found in Hittite and old Babylonian, but that the Egyptian is different. He connects the Hittite "arm and dagger" sign with the Syriac word zayin, "a weapon."

Old Semitic	 aleph.	I zayin	Z jod	Y Kaf.
Hittite				

Jensen, p. 104.

Conder* looked upon the hieroglyphs as ancient, of about 160 emblems, but that they produced a hieratic script--a syllabary of at least 60 emblems--which was diffused through Asia Minor, Syria, Cyprus, Crete, Palestine, Egypt, and even as far west as Spain. "This syllabary was used by Greeks in Cyprus; but was evidently borrowed, as it is very insufficient to express Greek sounds." Since it only retained one kind of syllable like ba, be, bi, etc., and not ab, eb, ib, etc., it thus preserved only about 60 out of 160 hieroglyphs.

* "Writing" in Murray's Dict. of the Bible." Cp. J.E.H. Thomson, "The Samaritans," pp. 211-221.

Conder believed that all the signs occurring at Gezer, Lachish, on the foreign pottery at Kahun in Egypt (18th Dynasty), and in Cappadocia and Cilicia were all derived from the Hittite script. He even goes so far as to blankly state that "it is recognized that the extra Greek letters ($\nu \phi \chi \psi \omega$) are derived from this script, which also furnished eleven extra letters to the Lycian alphabet used in the 5th century B.C." He saw twenty-seven similarities between Crete and Cyprus systems, some of which "are found in Carian texts, while this system also accounts for at least five extra letters of the so-called "celt-Iberian" alphabet (evidently of Greek origin) found on coins in east and north-east of Spain."

Now, while all of this is very well, it does not prove the Hittite origin of these similar signs. It must be remembered that others have advocated other origins on the same grounds.

Concerning the "Phoenician" alphabet more specifically, Conder said in his article that "the most likely solution is that the Phoenicians adopted the syllabary springing from the Syrian (Hittite) system of hieroglyphics, which thus formed the original source not only of Greek or Lycian extra letters, but of the whole alphabet."*

In regard to his table given on the next page, it should be said that while he gives the Akkadian forms and recognizes that "the emblems were common to the Akkadian and











* op. cit. p. 955.













Number	Sound	Assyrian	Babylonian	Akkadian	Syrian	Syllable	Greek	Phoenician	Letter	Hebrew
1	AU								A	א
2	AB								B	ב
3	GAU								G	ג
4	DU								D	ד
5	E								E	ה
6	DU								V	ו
7	UZ								Z	ז
8	KHAV								H	ח
9	UT								T	ט
10	YA								I	י
11	GU								K	כ
12	LU								L	ל
13	MI								M	מ
14	NU								N	נ
15	SAN								S	ס
16	'A								O	ע
17	PI								P	פ
18	US								S	ש
19	GU								Q	ק
20	ER								R	ר
21	SA								S	ש
22	TA								T	ת

Plate xxxv.

Syrian (Hittite) systems," he maintains that "the later forms were Syrian origin and have no direct connection with the later cuneiform signs." He concludes: "The Syrian syllabary seems to be the parent of all letters and traces back to the Hittite, not to the Babylonian hieroglyphics." It ought also to be explained that the term "Syrian" in the table means "Hittite," and "syllable" means the Cypriote syllabary.

In explanation of each letter, Conder gives the following remarks:

1.  , Heb. 'āleph "ox;" Gk. alpha; Bab. alpu; Akkad. aw, am, "ox:" the head of an ox.
2.  , Heb. Bêth, "house;" Gk. beta; Bab. bitu; Akkad. ab, "house:" a hut.
3.  , Heb. gîmel, from a root meaning "to bend;" Akkad. gau, "bend;" Gk. gamma; Akkad. gam, "bend:" a crook, having the sound ga in Cypriote.
4.  , Heb. dāleth, "swinging;" Gk. delta; Bab. daltu; Akkad. du. Neither the Akkadian sign nor the Phoenician letter resembles a "door," but more probably a "bucket" (Arab. delu).
5.  , Heb. hē; Gk. e-pilon "short e"; Akkad e, "house;" The oblong palace; Bab. shakanu, "abode." The sign has the sound e also in Cypriote.
6.  , Heb. vav (or wāw); Gk. bau; Akkad. bu, "young:" a bud, which has the sound bu in Cypriote.
7.  , Heb. zayin, "weapons;" Gk. zeta; Addad. uz, "quiver:" arrows in a quiver.
8.  , Heb. hêth, "wall;" Gk. êta; Akkad. hav, "fortress:" a walled enclosure; Cypriote khe.
9.  , Heb. têth, "turning;" Gk. thêta: resembles a wheel. Perhaps, Akkad. ut, for the "disk" of the sun.
10.  , Heb. yōdh, the "hand;" Gk. iota; Akkad. ya (Turkish aya, "open hand"); Bab. idu, "hand." Probably the Cypriote ye.

- 11  , Heb. kaph, "hollow of the hand;" Gk. kappa; Akkad. guv, gub, "hand." Cypriote ke.
- 12  , Heb. lāmedh, of which the meaning is not known; Gk. lambda; Akkad. lu, "yoke." (lam-da in Akkadian meaning "plough yoke.") Cypriote lu, a "yoke." The Greek preserves the form best.
13.  , Heb. mēm, "waters;" Gk. mu (Aram. mu, "water.") The Gk. form suggests "waves," and the Babylonian me, "water," is a representation of waves. Cypriote mi is nearest the Gk. form.
- 14  , Heb. nūn; Gk. nu. Probably the Bab. nunu, "lord;" Akkad. nu: represented by a hand holding an ornamental sceptre.
- 15  , Heb. sāmekh, "prop," or "pole." Probably the Akkadian san, a "log;" Gk. xsi.
- 16  , Heb. 'ayin, "eye;" Gk. o-mikron "little o;" Bab. 'enu; Akkad. ig or iñg, "eye;" an eye sign.
- 17  , Heb. pē; Gk. pi. The sign is not like a "mouth", but like an "ear," (Akkad, pi, "ear.") The Cypriote pe has the required form.
- 18  , Heb. qādhê, "lurking;" Gk. san. The oldest forms resemble a snake. The Akkad. uz, "snake," also with sound sud.
- 19  , Heb. qôph, of unknown meaning; Gk. koppa. Perhaps Akkad. gu, "face", "mouth," "speech." Rendered qabu "to speak;" in Bab. Arab. qawa, "cry out."
- 20  , Heb. rêsh, "head;" Gk. rho (Aram. rau, "appearance," "figure"). The Cypriote ra has forms connecting the letter with the old sign of a man with a large head. Akkad. er (Turkish er) "man."
- 21  , Heb. shîn, supposed to mean "tooth" (shēn); Gk. sigma (Arab. shag, "crush"); Akkad. shi, "tooth." The emblem resembles a tooth. The Cypriote se has sometimes this form exactly.
- 22  , Heb. tav, "mark;" Gk. tau. The word in Arab. means "to brand." Probably the Cypriote ta, which has the recognized form. In Akkad. ta appears to mean "to strike."

It will now appear to the reader that Conder derives both the letter-name and the letter-form from the Hittite

language and script. But nowhere has he proved the names to have come from Hittite, and the resemblance of forms is not especially striking. J.E.H. Thomson (The Samaritans, p. 212) maintains: "If one looks at the table, it is found that the parallel signs do not always suit, e.g., the tenth symbol in the Hittite column seems decidedly more like the hieroglyphic source of the eleventh Semitic sign than the tenth; on the other hand, the Hittite eleventh suggests the Hebrew tenth." Thomson also goes on to remark that the fact of the non-alphabetic character of the Hittite script would be against the theory. We have already mentioned, however, Cowley's theory that the hieroglyphs may actually be alphabetic or partially so, and even if they are not, the theory does not necessarily suffer thereby. However, it is at present undemonstrable.

Another advocate of the Cypriote origin, more especially, is Frätorius. He makes some very minute comparisons in his essay "Über den Ursprung des kanaanäischen Alphabets."* The theory, stated briefly, is that the "Canaanite" alphabet was derived from the Cypriote syllabary or a forerunner of the latter somewhere in Asia Minor. He maintained that the so-called "Phoenician" alphabet was not an alphabet at all but really a syllabic system like the Cypriote. Just as the Cypriote had only open syllables, such as ba, pa, etc., so in reality did the "Phoenician." The Cypriotes had already developed the idea of representing a single consonant with a

* Berlin, 1906. A translation is available in the Annual report of the Board of Regents of the Smithsonian Institution for 1907, pp. 595-604.

syllable, i.e. p with po, to be determined only by the context. For instance, 𐤏𐤍𐤏 i.e. Ka-ta-l was likewise written by the Cyprians 𐤏𐤍𐤏 i.e., Ka-ta-l. In addition to this like imperfection in each, Prätorius also mentions that "signs for compound (closed) syllables (bak, daf, etc.) are used in neither, nor are doubled consonants considered in either." He also finds a point of general similarity in the fact that both systems read from right to left!

An examination of the Cyprian syllabary on page 152 will show that five syllabic signs were made from each consonant and we have already mentioned that in rare cases the consonant in any one of these five signs was used for the mere consonantal sound itself. It is Prätorius' thought that the "Canaanites" adopted only one of the five syllables and thus accentuated the mere consonantal sound. It became, thereby, more indefinite but also more simple. This simplicity won out and from this step the Greeks easily created a pure alphabet.

The idea of Prätorius concerning the Cypriote vowels is ingenious, to say the least. The syllabary did contain five quantitatively indifferent vowel signs, a, e, i, o, u, but their use was very limited. The Semites adopted a "as a polyphone sign for syllable-forming vowels in general (𐤏 , 𐤍 , 𐤌 , 𐤋 , and 𐤊 = a, e, i, o, u)." Just as they adopted one of the five syllables beginning with the same consonant, so they adopted one of the five syllables "not inherent in a consonant." Prätorius says that "they learned through this mode of writing, something which was perhaps especially sug-

gested to them by the phonetic system of all the Semitic languages--that every vowel which begins a syllable is introduced or can be introduced by a very weak consonant, such as the Arabic hamza; they gained through this mode of writing an understanding of this weak consonant itself. ✕(X) was for them no more a polyphone vowel sign, but became a syllabic sign for hamza with inherent a, e, i, o, and u, and also a sign for mere hamza. The uniformity of the Canaanite system of writing was not broken up: X stood on the same level with 𐤀, 𐤁, 𐤂(b,g,d), etc.**

Prätorius feels that it is a mere coincidence that ✕ migrated to Greece as "a", due largely to the very name, 'aleph--the hanza "not being felt or being deliberately neglected." So also E, H, and O.

The above reasoning is fairly clever, but the regularity of the "Canaanite" practise of adopting only one syllable from each set of five here breaks down, because they did take over also the i and u. It seems that the e and o were neglected.

Prätorius believes, further, that the i and u became the consonants y and w in the same way and for the same reason ^{that} ~~as~~ the a became aleph. "Of the syllable-forming vowels, i and u became polyphone syllabic signs for i (= consonant y) and u (= w or y) with attached a, e, i, o, and u (𐤁, 𐤂=ya, ye, etc; 𐤃, 𐤄=wa, we, etc.) and also signs for i and u alone. The uniformity of the system was thus also here preserved."** The i, having been changed into a polyphone syllabic sign, the

* op. cit. p. 599.

** id. p. 600.

Cypriote syllabic signs beginning with j (see table) were neglected, according to our writer. This also accounts for the apparent neglect of those beginning with u (or w). But Prätorius believes that there were very early in Canaan two forms for u (w)--one from the vowel i (as above) and the other from one of the Cypriote syllables beginning with u. He chooses I, I (ue) and believes it survived in the Greek digamma, Latin F, (FL) and that the South-Semitic Q for u comes from it also. In the Greek alphabet it happened to retain sixth place while the upsilon (for numerical reasons) was placed toward the end, it being a mere coincidence that the Greeks chose digamma for a consonant and upsilon for a vowel. "It is also evidently accidental that digamma sooner or later disappeared from both the Canaanite and Greek alphabets (but not from the South-Semitic alphabet.)"*

It is the contention of this scholar that the Semites chose for the three emphatic sounds ṭ, ṣ, and ḵ the syllables ending in u rather than e, as might be expected since the e-syllables were used most frequently by the Cypriotes for the mere consonant. But u was chosen, since these emphatic sounds are followed by the sound-color of u and o. However, when one comes to examine the Cypriote syllabic sign for tu it does not seem after all to bear such close resemblance to Q. It is FF FF FF and FF. Nor does su, ṣ or ḵ look much like ṣ. Nor does qu, * (more rarely ṣ) resemble Q.

The resemblances between the vowel-sounds is likewise

* op. cit. p. 601.

not overly great. For instance, does 𐤀 look like 𐤁 , or 𐤁 like 𐤂 , or 𐤂 like 𐤃 ? It is, of course, the idea of Prätorius that the changes have come about through "cursiveness." For instance, 𐤀 is a mere abbreviation of strokes for the 𐤁 . The 𐤁 was first abbreviated into 𐤂 which became 𐤃 , etc.

We shall merely catalogue some of the other similarities that he claims.

ne in Cypriote is 𐤎 which became 𐤏 or 𐤐 .

me 𐤍 𐤎 𐤏 𐤐 became 𐤑 . He says, "I must confess, however, that I do not here feel on solid ground, and the wealth of Cypriote signs that offer themselves for selection is disquieting."

le 𐤌 , occasionally 𐤍 and 𐤎 became 𐤏 , but li 𐤌 looks more likely.

re 𐤓 and 𐤔 hardly became 𐤕 but ra 𐤓 𐤔 could have. ro 𐤓 he thinks unlikely in spite of the name of r.

pe 𐤑 𐤒 𐤓 became 𐤔 ?

po 𐤑 , 𐤒 , also 𐤓 𐤔 became 𐤕 p.

ke 𐤋 sometimes 𐤌 , became 𐤍 .

ko 𐤋 , 𐤌 , and 𐤍 became 𐤎 .

From ke also came 𐤏 and 𐤐 "although the Canaanites had at their disposal the syllabic signs 𐤑 ka and 𐤒 ki.

to 𐤕 may have become 𐤖 d.

se 𐤑 became 𐤒 .

si 𐤑 𐤒 sometimes 𐤓 𐤔 𐤕 𐤖 became 𐤗 . He speaks of samekh as meaning "support" which is borne out by the looks of the Cypriote sign.

Prätorius concludes his article with these words:

"I thus claim for about half of the 22 signs of the Canaanite alphabet a certain knowledge of their origin. And this certainly lends some weight to the consideration of the other resem-

blances and surmises that otherwise would have to be dismissed without further reflection as coincidents and fantasies."*

We will bring this chapter to a close by saying that this theory is all right in SPOTS. Like the others already noted it falls far short of a demonstration. As far as the Hittite language is concerned, we know too little about it, and under those conditions, similarities of form mean very little. It is, after all, quite easy to find close comparisons in any set of hieroglyphs. It is only when they can be translated and factors allowed to come into play, other than that of mere form, that real credance may be given to such comparisons. We now proceed to examine the Egyptian hieroglyphs.

* op. cit. p. 604.

THE OLD EGYPTIAN THEORY

The Egyptian theory has had two seasons of popularity. 1916 may be thought of as the division between the two periods, although the older phase of the theory had long since lost favor by that time. But in 1916 the new theory originated with the paper of Prof. Gardiner. Each of these theories has had two aspects, namely, the hieroglyphic and the hieratic. We will reserve the later phase of the Egyptian theory for the next chapter, and treat in this what may be called the OLD Egyptian theory.

HIEROGLYPHIC THEORY

The belief that the Semitic alphabet came from the Egyptian hieroglyphs found an early champion in Lenormant who, however, later abandoned his own suggestion. But even before him, it appears that Champollion was the first to advocate the view. Maspero tells us in his *Histoire Ancienne** that in his *Lettre à M. Dacier*** "Champollion émit l'opinion que l'alphabet phénicien dérivait des hiéroglyphes d'Égypte." Champollion was also really the first man to reveal the fact that there was hidden away among these hieroglyphs a consonantal alphabet.

Maspero also says*** that "ses idées développées par Salvolini" (in his *Analyse grammaticale de l'inscription de Roseets*, p. 86 sqq.) "modifiées par M.M. Ch. Lenormant et Van Drival, n'avaient reçu aucune consécration scientifique,

* pp. 744-5.

** p. 80

*** op. cit. p. 745.

lorsque M. de Rougé reprit le problème pour son compte et en donna la solution." He adds in a footnote that "M. Halévy a essayé de prouver que le caractère phénicien dérivait non pas des formes hiératiques, mais des formes hieroglyphiques de l'écriture égyptienne"* We need not linger with Halévy** but merely point out how Lidzbarski revealed his real ignorance of Egyptian hieroglyphs.*** We reproduce, however, for the sake of being complete, a table of his comparisons.

Altsemitisch	Hieroglyphen	Altsemitisch.	Hieroglyphen
⋈ (alef)	𐀀	○ (ʿ)	𐀁
𐤀 (b)	𐀂	𐤁 (p)	𐀃
𐤁 (k)	𐀄	𐤂 (r)	𐀅
𐤂 (k)	𐀆	𐤃 (š)	𐀇
𐤃 (n)	𐀈	𐤄 (t)	𐀉
𐤄 (s)	𐀉		

𐤅 (h) aus 𐤁	𐤆 (g) aus 𐤄	𐤇 (l) aus 𐀅
𐤆 (j) aus 𐤁	𐤇 () aus 𐤆	𐤈 (d) aus 𐤄
𐤇 (q) aus 𐤂	𐤈 (q) aus 𐀅	𐤉 (t) aus 𐤄
𐤈 (m) aus 𐤃	𐤉 (w) aus 𐤁	

It will hardly be necessary to review these earlier

* See *Mélanges d'épigraphie sémitique*, 1874, pp. 168-189.

** See "Nouvelles considérations sur l'Origine de l'alphabet" in *Revue sémitique* IX. (1901), pp. 356-370.

*** *Ephem.* II. pp. 121-22.

attempts at any great length. As de Rougé said in his essay* "aussitôt que Champollion eût prouvé l'existence d'un alphabet véritable, tenant sa place, dès la plus haute antiquité, au milieu des diverses combinaisons graphiques que comprenait le système des écritures égyptiennes, on fut naturellement entraîné à rechercher si les origines de l'alphabet sémitique ne se relieraient pas à la première invention des Egyptiens."** This is what happened. No sooner had Champollion died than a pupil of his, Salvolini, "guidé sans doute par quelques notes de son maître, voulut faire faire un nouveau pas à la question... il prétendit démontrer que les lettres phéniciennes avaient été tirées de certains hiéroglyphes. Mais les comparaisons établies par Salvolini pèchent par de nombreuses fautes contre la critique."*** De Rougé criticised his work, first, because he had employed a large number of Egyptian signs that had never been used alphabetically by the Egyptians themselves; and second, because he even used some of the Demotic forms as prototypes of the Phoenician. What led de Rougé to criticise him, has led more modern scholars to reject until recently the whole hieroglyphic hypotheses. There is no doubt but that Salvolini adopted too wide an area in which to make good his master's thesis.

We are more interested in M. Ch. Lenormant who represents in a more thorough way the old hieroglyphic theory. It was the year 1838 when de Rougé heard Lenormant give his course of lectures in history. These lectures were never

* Written in 1859 but published by his son in 1874.

** "Memoire sur L'Origine Egyptienne de l'Alphabet Phenicien." p. 2.




*** op. cit. above, p. 4.

published, but in 1859 de Rougé secured the old notes from his former teacher for incorporation in his paper on "The Egyptian Origin of the Phoenician Alphabet," which he read that year before l'Académie des Inscriptions et Belles-Lettres. This paper was lost for a time, but after de Rougé's death was found and published by his son in 1874. Thus it comes about that we have the views held by Lenormant in 1838.



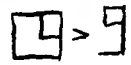






















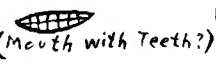

De Rougé writes: "En ce qui concerne les emprunts directs faits par l'alphabet phénicien à l'écriture égyptienne, le système proposé dans ce cours d'histoire peut se formuler de la manière suivante: les Phéniciens auraient choisi, dans la masse des hiéroglyphes qui frappaient leurs yeux, un certain nombre de figures. Le choix aurait été dirigé de telle sorte que chaque objet présentât, dans l'initiale de son nom, un des éléments nécessaires à l'écriture des mots de la langue phénicienne. Ainsi, on aurait emprunté aux monuments égyptiens le dessin d'une tête de boeuf, et sans s'inquiéter de ce que cela pouvait signifier dans les hiéroglyphes, on en aurait fait l'a vague ou aleph, א , du système phénicien, parce que le mot boeuf, אֵלֶף, Alouph, commençait par un aleph. Les objets ainsi choisis n'avaient pas la même valeur phonétique dans les deux écritures."*

It is necessary to appreciate this method of getting an alphabet because some modern scholars have practically returned to Lenormant's view. To repeat, he believed that the Phoenicians had chosen out of the great bulk of Egyptian







* op. cit. p. 6.

hieroglyphs certain pictures to which they gave good Semitic names according to what they represented to them, regardless of what the hieroglyphs signified in Egyptian. Thus to the hieroglyph  they gave the name "beth" house, because, in their eyes, it looked like the plan of a house. And so they used  which became , to represent the sound of b in their new alphabet, because b was the first letter of "beth." This is, therefore, said to be an alphabet based on the principle of acrophony.


The following table will give Lenormant's comparisons:*

	 aleph	ox	
	 beth	house	
	 phé	mouth	hieratic 
	 resh	head (profile)	
	 caph	hand	
 (Basin)	 mim	water	
	 daleth	door	
	 ain	eye	
	 quof	(human face is hiero.)	name unknown.
	 samech	("Tat" fr.)	id.
 Serpent	 heth		id.
	 shin	tooth	
 (Mouth with Teeth?)	 tau	a sort of cross.	

More problematic are:



























	 waw	
	 zain	
	 yod	hand

* Note: It will be noted that the letters are of a later type. Even the Moabite Stone had not then been discovered.













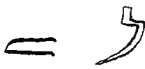


Lenormant thought that the hē 𐤅 was an offshoot from the heth and that the gimel 𐤂 was a Phoenician addition of a letter not possessed by the Egyptians. Finally, the nun 𐤍, which name signifies fish, "rappelle l'egyptien abyssus, qui s'ecrit par le symbole des eaux ."

De Rouge adds that "la plus grande partie des figures indiquees n'appartiennent pas a l'alphabet hieroglyphique."*

It might here be well to put before ourselves the Egyptian hieroglyphs that may be called purely alphabetic.

	Values	Name	Normal characters	Variants
1.	a	eagle		
2.	ā	reed		
3.	ā	arm		
4.	ī	parallels	"	
5.	i	double reed		
6.	u	chick		e 
7.	k	bowl		U 
8.	k	throne		
9.	q	angle		
10	x	sieve		 
11	h	meander		 
12	h	knotted cord		
13	t	semicircle		
14	t	hand		
15	t'	snake		 
16	θ	tongs		 

* op. cit. p. 8.

17	s	chairback		
18	š	inundated garden		
19	p	shutter		
20	b	leg		
21	f	cerastes		
22	r	mouth		
23	l	lioness		
24	m	owl		
25	n	water-line		

Still within the hieroglyphic phase of the Egyptian theory, M. Van Drival^{*} was the first man, so far as we know, who paid any attention to the Phonetic aspect of the problem. He looked for the Egyptian forms that would express the corresponding sounds. But like Salvolini, he did not confine himself to the alphabetic signs given above.⁺⁺

HIERATIC THEORY

It was de Rougé who first gave attention to the Egyptian hieratics as a possible source of the alphabet. In his Memoire quoted above he wrote: "Plusieurs savants ont déjà cherché sur les monuments écrits de la vallée du Nil le prototype de cette écriture; mais de graves difficultés ont entouré leurs recherches et neutralisé presque complètement leurs résultats. Je crois avoir trouvé la solution de ces difficultés par une nouvelle étude, fondée sur des documents beaucoup plus anciens que ceux de mes devanciers."^{***}

* Grammaire comparée des langues bibliques.

** op. cit. pp. 8-10.

*** id. p. 1.

These documents consisted of only three hieratic papyri of the early empire. Taylor points out that these are the only fragments of hieratic writing that date prior to the Hyksos conquest, and that they were not known in Lenormant's time.* All other MSS. were later, most of them belonging to the 19th Dynasty of the New Kingdom. The Demotic, it might be stated, is still later, and represents the very cursive form originating in the 22nd dynasty. Of course, the Semitic alphabet was already at that time in existence.

These three early MSS., were: (1) Some fragments in the Museum at Berlin containing cartouches of the kings, Amenemhat and Usurtasen, and therefore of the 12th dynasty, or before the Hyksos invasion. (2) A MS. belonging to Prof. Lepsius which mentions Khufu and other kings of the earlier dynasties of Memphis. (3) The "Papyrus Prisse" in the Bibliotheque Nationale at Paris, published in 1847.** For a description of this beautiful MS of some 18 pages, see Taylor's first volume, p. 95. He tells us that a "statement at the end of the papyrus shows that it is only a copy of the original work, which purports to have been composed by Prince Ptah-Hotep, who lived during the reign of Assa, a king of the fifth dynasty. The date of the copy cannot positively be determined, but as the MS. was found in a tomb of the 11th dynasty, the copy must be anterior to the Hyksos invasion."***

* Alphabet I, p. 94. Canon Taylor has given great prominence to de Rougé's theory in his two big volumes on the Alphabet.

** Fac-simile d'un papyrus égyptien, etc. par M. Prisse d'Avennes, Paris, 1847.

*** For discussion of the papyrus see also de Rougé, p. 25; Chabas, Le plus ancien livre du monde. Étude sur le papyrus Prisse, in Revue archéologique for 1858; Mahaffy, Prolegomena to Ancient Hist. pp. 277-89; Birch, Egypt, p. 49; Brugsch-Bey, Hist. of Egypt under Pharaohs. I, pp. 92-93.

An example of the script of the Prisse MSS. will reveal to the reader a bold, round, black cursive style, quite different from the later hieratics, which are essentially the conventionalized hieroglyphs.



From Taylor I, p. 97.

De Rougé lays down five principles of procedure for himself. (1) Choisir le type phénicien le plus archaïque. (2) Reconnaître la forme des caractères égyptiens cursifs à une époque aussi reculée que celle où l'on peut placer l'origine de l'alphabet semitique. (3) Les caractères à comparer devront être choisis par preference parmi les signes alphabetiques. (4) La comparaison sera établie signe à signe et en se conformant à la correspondance des articulations dans les deux langues. (5) Nous devons ensuite faire ressortir les ressemblances des lettres ainsi rapprochées et chercher à expliquer les différences en étudiant les circonstances qui ont pu dominer leurs modifications respectives.*

Concerning the first point it needs to be pointed out that the most ancient Phoenician script at his disposal at that time was the Eshmunazar inscription, which differs somewhat from the earlier type. Even the Moabite Stone (1868) had not then been discovered.



We have already given the Egyptian materials that he

* op. cit. p. 11.

used. Their date (subsequent to the Hyksos invasion) separates them by as much as two thousand years from Eshmunazar (3-6 century).

He found his prototypes entirely among the semi-alphabetic signs of the Egyptians, and as to the fourth proposition, Taylor remarks, that "in this labori^ous task he makes all possible use of the Semitic transcriptions of Egyptian words which occur in the Bible, but he relies chiefly on the Egyptian transliterations of the Semitic names of Syrian towns which are found in the records of the Asiatic conquests of the kings of the New Empire, and in the curious road book of Syrian travel contained in the Papyrus Anastasi." *

Taylor believes that de Rougé has discovered every possible prototype in these hieratic MSS., that they reveal a proper resemblance, and that he has given a reasonable explanation of all anomalous cases. It will be well to look for ourselves. We reproduce below de Rougé's own table. (See next p.)

There can be no doubt that de Rougé adopted a scholarly procedure. He accepts the alphabet already in use among the Egyptian characters. He compares the forms of the labils in each language; then the palatals; dental, liquids, sibilants, breaths, and semivowels. For instance, for the Semitic p he discovers that it is constantly transliterated in the names of towns by the Egyptian  "shutter" which is the commonest of hieroglyphs. In the Papyrus Prisse it appears as  which

* Alphabet I, p. 92.

Egyptian *Phenician* *grec*
Ancien

2 4 A

5 9 B

6 1 1

7 4 D

8 3 E

9 2 F

10 7 I

11 8 K

12 0 L

13 5 M

14 6 N

Egyptian *Phenician* *grec*
Ancien

15 16 L

17 17 M

18 18 N

19 19 O

20 20 P

21 21 Q

22 22 R

23 23 S

24 24 T

25 25 U

26 26 V

he compares with the Semitic 7. He thinks that the three strokes represented teeth that were responsible for the name pē, "mouth," given to it by the Semites. They were subsequently lost from the Phoenician 7 and indeed even in a measure from later hieratics, such as the Berlin Papyrus, where only three dots appear.

But to prolong our consideration of this theory would be to give undue emphasis to an hypothesis now abandoned by all scholars. However, the Egyptian itself is not by any means given up by all, but only de Rouge's particular theory. That the Egyptian pictographs really furnish the true origin of the alphabetic characters is the opinion of a good many Egyptologists.

The reasons, quite apart from all comparisons, for this opinion, are nicely summarised by Heinrich Schafer.* In his article on "Die Vokallostigkeit des 'phönizischen' Alphabets," he laid down ten propositions wherein he argued that the prototypes of the peculiarly vowelless alphabet of the Phoenicians must be looked for in pictures, and that Egypt alone can furnish them. His arguments are as follows:

(1) "Das semitische ("phönizische") Alphabet, wie es uns etwa seit dem Jahre 900 v. Chr. vorliegt, ohne dass wir Vorstufen kannten, aus denen es in natürlicher Entwicklung entstanden wäre, enthält nur Zeichen für die Konsonanten. Es zeigt keine Spur davon, dass den einzelnen Schriftzeichen etwa Vokale inhärierten. Dass man schon früh gelegentlich

* Zeitschrift für die Ägyptische Sprache LII (1915) p. 95f.

die Buchstaben ' , ʾ , ʔ und ʕ zur Andeutung von Vokalen benutzt, spricht nicht gegen die Vokallosgkeit des Alphabets, sondern gerade im Gegenteil für sie."*

But right at the very outset, we find an Assyriologist questioning this statement. Prof. Luckenbill** asks: "How does Schäfer know that the Phoenician alphabet was originally vowelless? Is the use of 'ʾʔʕ to indicate vowels proof of this? Is there any evidence that these letters were not thus used from the start? If there is, it ought to be produced."*** He refers to the fact that these characters, 'ʾʔʕ, are found in use as vowels both in the Mesha' and the Siloam inscriptions, and that while "the scriptio defectiva is the rule" as Cooke**** says, still "some of the vowels are written. The characters used to express these are also used to write certain consonants."

To quote him at some length: "The fact that our Semitic philologists have been vacillating between the terms semi-vowel and semi-consonant is significant. When any attention is paid to the phonetics of modern spoken Semitic dialects, it is discoverable that they violate most of the 'laws' according to which, so say the grammarians, Semitic words were 'originally' pronounced. All of which goes to show that we have needlessly been heaping up difficulties down to a hair's breadth between vowels and consonants--a feat which our most modern phonetic science has difficulty in doing.

* op. cit. pp. 95-96.

** AJSL. 36, pp. 27-39.

*** op. cit. p. 32.

**** A Text Book of North Semitic Inscriptions, pp. 5 and 16.

We do the same when we dogmatically assert, for example, that each initial vowel in the Semitic originally had a "clear" beginning, that is, was preceded by a consonant, \aleph , or as we say in modern phonetic parlance by a "glottal stop," and that only later were "gradual" ~~beginning~~ beginnings indulged in.*

But to return to Schäfer's arguments, we summarize the remainder:

(2) The consonants of an alphabet bear the meaning of the word while the vowels are used merely for inflectional purposes.**

(3) The inventor of a vowelless alphabet took into consideration the peculiar character of the Semitic language.

(4) But the inventor would not want to express ideas such as $\aleph\aleph$ but $\aleph\aleph$ "killing," and $\aleph\aleph$ "killed," and $\aleph\aleph$ "he killed."

(5) The lack of vowels is an imperfection, and all languages that subsequently adopted the alphabet had to supply the lack. If the inventor was not conscious of this defect,*** it was because of the influence of something already in existence, such as a former pictorial stage of writing.

(6) It could only be the pictorial system of writing that would induce people to write mere ideas, for an idea is drawn. Vowels are negligible.

* op. cit. pp. 33-34.

** Jensen is of the same opinion. See his "Geschichte" p. 99.

*** See Stevenson, "Alphabet" in Harmsworth's Encyclopedia, where he argues that the inventor deliberately decided against vowels in order to allow a freedom of pronunciation in a country of related dialects.

(7) Only those who had been accustomed to pictorial writing could dream of forming a vowelless writing.

(8) The Phoenician alphabet had no direct pictorial predecessor, so we must look elsewhere for it. The Hittite and the Cretan lacks the Semitic character, but the Egyptian had as far back as the 4th millenium developed an alphabet without vowels. The pictorial writing of Babylon, on the other hand, was made by non-Semites, which developed into a syllabary with vowels. *

(9) Schäfer concludes that the alphabet, therefore, came only from Egypt, but in

(10) He admits that the "inner" and "outer" elements may have sprung from different sources.

Schäfer has much in his favor. Scholars have always felt that the names of the letters alone indicate a pictorial source. Gardiner has referred to Schäfer favorably.** Luckenbill, on the other hand, takes serious exception to his conclusions on the vowels. And Pilcher***who argues for an arbitrary invention does not believe that they came from pictures at all. But most scholars do, and recent discoveries seem to bear out this belief.

The most recent phase of the Egyptian theory bears upon new evidence--namely, the Sinaitic Inscriptions. Do they furnish the prototype we have been searching for?

* See Luckenbill, AJSL 36, p. 30-32, who asserts that the vowels in the pre-Semitic period of the cuneiform were not so well looked after as Schäfer supposes, and that the Assyrian frequently dropped final vowels.

** JEA III, p. 12. *** PSBA. 1904, p. 168.

THE SINAI INSCRIPTIONS

The tendency to return to the Egyptian hieroglyphs as the source of alphabetic writing has been greatly stimulated by the discovery in 1905 of eleven curious fragments bearing a strange writing. These were found in the Peninsula of Sinai at the site of Serâbît el-Khâdim by the Egypt Exploration Fund expedition conducted by Petrie. The account of their discovery (really by Petrie's wife) may be read in Petrie's "Researches in Sinai" 1905, p. 130. Only three small photographs were published in these pages, and upon them alone were based the first discussions by scholars. Professor Petrie himself merely passed them up with the bare statement that the script probably represented "one of the many alphabets which were in use in the Mediterranean lands long before the fixed alphabet selected by the Phoenicians."*

In Memoire 36 of the Egyptian Exploration Fund, Gardiner and Peet published these "foreign inscriptions" in 1917, along with other "Inscriptions of Sinai."** The year before Gardiner had given in connection with his article on the alphabet photographs and drawings of these inscriptions.*** They quite certainly reveal a writing that has been greatly influenced by the Egyptian hieroglyphs, and yet show a distinct individuality of their own. Indeed, as Petrie says, they may be of non-Egyptian workmanship, perhaps of foreign workmen

* Researches, p. 131. For his theory on the origin of the alphabet, see our page .

** See Table LXXXIII.

*** JEA, III, 1916, pp. 1-16.

at the mines.* Serâbît el-Khâdim is an isolated and remote place on the Peninsula where a temple to some local goddess had been built and to this goddess the Egyptians gave the name of their own goddess, Hathor. In this temple and near the mine "L", a mile and a half distant, the inscriptions in question were found.

Petrie dates the fragments around 1500 B.C. "The only indication of date," he writes, "that I could find at the mine L, was a bit of buff pottery with the red and black stripe which we know to be characteristic of the time of Tahutmes III, and perhaps rather earlier, but not later. The figure 138 (i. e. No. 346, A.H.G.) was found at the doorway of the shrine of Sopdu, which was built by Hatshepsut. The sphinx is of a red sandstone which was used by Tahutmes III, and not at other times....."**. On the cumulative basis of these facts, therefore, he says, "We are bound to accept this writing as being of c. 1500 B.C."

But Gardiner is inclined to a period about 1800 B.C. First of all, he and Peet have shown in the Memoir 36 that the shrine of Sopdu mentioned above by Petrie dates back as far as 1800 B.C. Secondly, on the isolated stele in the neighboring Wady Nasb (No. 46 of Memoir 36) which was cut in the twentieth year of Amenemmes III he finds the sign of an ox's head. The third reason given is that Ptah is always represented at Serâbît el-Khâdim in the Middle Kingdom as being in his shrine--just as one of these fragments show--and

* Numerous hieroglyphic records dating from the First to the Twelfth Dynasties have been found here, showing that the turquoise had been exploited by Egyptians from the earliest dynasties.

** p. 131

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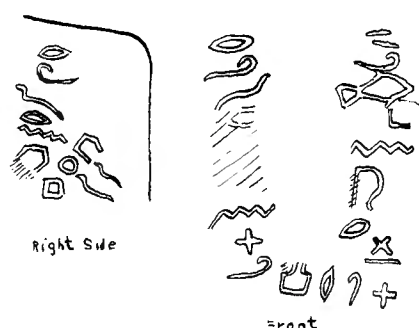
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* Numerous hieroglyphic records dating from the First to the Twelfth Dynasties have been found here, showing that the turquoise had been exploited by Egyptians from the earliest dynasties.

** n 131

gives instances in the reign of Amenemmes III and IV. The depiction of Ptah in the New Kingdom is most generally without his shrine. Lastly, he finds reference to Semites in the Egyptian expeditions only on a stela of the reign of Amenemmes III. He adds, however, that "these indications must be admitted not to amount to very much."^{*} This last remark is characteristic of Gardiner's remarks throughout his paper and his modest attitude toward his problem.

The first published attempt at decipherment, we believe, was the effort of Ball upon the statue No. 346.^{**} We reproduce below Gardiner's drawing of the characters on this "crudely executed squatting figure."



The writing appears on the front and right side. The figure was found, along with No. 347, in the temple itself. Ball did not make a very satisfactory contribution to the decipherment because he did not take notice of the line drawn between the two "crosses." He thus read $q + x$ 'Athtār, the South Arabian equivalent of Ishtar. He was led to remark, therefore, that "the chief interest of the thing lies in the fact that the identity of Hathor with Iṣhara-Iṣtar is proved by this inscrip-

* op. cit. pp. 13-14.

** PSBA. xxx. 1908, p. 243.

tion." The important thing is that Ball considered that he had in this inscription a script that must approach very close to the proto-Semitic type.

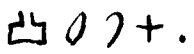
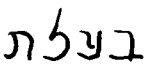














In 1911, the French theologian, Charles Bruston*, quite independently of Ball, worked out a fantastic translation of this same inscription by turning it upside down. His result was עתרו שם (ideog.) שנת -- "Erected for a whole-offering of Hathor."









The next man to notice these characters was Pilcher.** His verdict was "mere scratchings." Considering them as meaningless imitations of Egyptian stelae and statues, he wrote as follows: "Everything is consistent with the idea that these strange characters were the pastime of some illiterate person, so that it is unnecessary to attempt to find any intelligent meaning in them."*** As over against this, Petrie had said that "it is a definite system, and not merely a scribbling made in ignorant imitation of Egyptian writing by men who knew no better."**** This is shown, of course, by the presence of good hieroglyphs, and by the repetition of the same group of characters.






Pilcher's verdict was rejected in the same year by Sayce.***** Our good friend, substituted an explanation of scarcely more meaning. He compared the character that has now come to be looked upon as a "beth" to certain common quarry-

* Revue de Theologie de Montauban, XX. 1911, p. 177f.
 ** PSBA xxxi. 1909 pp. 38-41.
 *** op. cit. p. 41.
 **** Researches, p. 130.
 ***** PSBA xxxi. 1909, p. 132.

marks of Upper Egypt, and called attention to the fact that the cross signified during the XIXth Dynasty at Karnak the syllable Ra in the name of Amon-Ra.

All of these attempts were practically fruitless until Gardiner, with access to the photographs of all the inscriptions involved, wrote his paper for the Journal of Egyptian Archeology in 1916. In that paper, he made use of the sequence of four characters that appeared five, if not six, times. This he took to be a word. On the statue reproduced above it may be seen as . Returning to Lenormant's old postulations, Gardiner read this word as  *Ba'alak*. In other words, he claimed that  was from the hieroglyph  which the Semites had named "Beth", house, and which had developed, no doubt through  into ; that the  was from the Egyptian  which the Semites had named "ayin", eye, and which had developed through the  into ; that  was from the hieroglyph  which became  and afterward the Semitic ; that  is the corresponding hieroglyph that later became the  "taw" of the Phoenicians. He doesn't say it in just this way, but this is what he means.

He does say that the inscriptions "are not in Egyptian hieroglyphic, yet many of the signs are obviously borrowed from that source. There are the human head , the ox's head , and the human eye , the very signs postulated by Lenormant as the originals of proto-Semitic *rōsh* , *'alf*  and *'ain* . There is the zig-zag , which we are sorely ^{tempted} to connect with  *mēm* "water." There is one instance of a hand (No. 349),

which might be yōd; the fish and snake, recalling  and , are alternate candidates for the value] (nūn or nahās). Finally, there are some other signs which have Egyptian analogies, ,  and , but which cannot as yet be identified with letters of the proto-Semitic alphabet."*



* op. cit. p. 14.

It will be seen that Gardiner's word occurs on Nos. 348, 352, 353, 354, and 345 as well as 346. Of this word he asks: "What more probable than that the word recurring in 5 or 6 different inscriptions should be the name of the local goddess, that is rarely omitted, in its Egyptian form of Hathor, from any of the hieroglyphic texts from the same site? And what more probable than that this goddess, who was known to the Egyptian visitors as Hathor, should have been called 'the female Ba'al' by their Semitic colleagues?"* He compares Isis-Astarte-Belit on the Phoenician stele of Byblos and suggests that the goddess of Byblos was very familiar to the Egyptians under the name of Hathor. It must also be noted that $\text{𓆎} \text{𓆏} \text{𓆐} +$ does not occur on the stele with Ptah but does appear on the sphinx.

From the positions of this word on the inscriptions it will be seen that the vertical lines read from top to bottom, and that the horizontal lines read from left to right. Cowley, however, has noted that No. 349 reads from right to left, and comments that "according to the usual rule it ought to read the other way, against the faces of the characters. But it seems to begin in the same way as no. 350, which must read downwards. In fact at the time when these monuments were inscribed, there was no fixed rule for the direction of this particular writing. Most often it is in vertical columns, but when horizontal it reads in the direction of the faces,** either from right to left or from left to right. Note also

* op. cit. P. 15.

** Prof. Sayce notes the same peculiarity in Meroitic.

that the tail of the 5 always points against the writing in 345, 346."*

Speaking of the direction of the writing, it will be well at this point to anticipate Sethe and Grimme just a bit. The former contends that this script is taken from the hieroglyphics rather than from the hieratics, just because the direction of writing is, like the hieroglyphic, in both directions. Grimme answers him by stating that the hieratics up to this period (1500B.C.) also had this freedom.


























To continue with Gardiner, we find him stating that of some 150 legible signs there are only 32 different types, "of which several are probably duplicates." From this scarcity of types out of so many characters, he concludes also that the writing must be alphabetic.

He finds that of 17 intelligible names of Semitic letters, at least six apply perfectly to characters on these inscriptions. They are the ox, house, water, eye, head and cross, or \aleph , \beth , \aleph , \aleph , \aleph and \aleph . He also notes the presence of the fish and snake which are "alternate candidates for the] (nūn or nahās)," and a "hand" in no. 349 which may be a "yod." Not on the basis of name, but on resemblance in form, he compares \aleph or \beth with the Semitic \aleph "zain;" \aleph with Semitic \aleph , \aleph ; \aleph with Phoenician \aleph ; \aleph with Sabaean \aleph ; \aleph with Semitic \aleph , \aleph . Thus, of his 32 characters, he leaves 17 unidentified. We reproduce his table of comparisons on the next page.










* JEA. III, p. 17.

Moabite Stone and early seals	Early Greek (reduced to type)	South-Semitic				Sinai Script	Meaning of Letter, name in Semitic	Original Name as constructed by Nöldeke	Egyptian hieroglyph compared.
		Sabaean	Liḥyāh	Thamūd	Ṣaṣā				
כ	1 א	𐩦	𐩦	𐩦	𐩦	1. 𐤀 𐤁	ox	'alf	𐩦
ב	2 ב	𐩦	𐩦	𐩦	𐩦	2. 𐤂 𐤃 𐤄	house	bet	𐩦
ג	3 ג	𐩦	𐩦	𐩦	𐩦		camel (?)	gaml (geml)	
ד	4 ד	𐩦	𐩦	𐩦	𐩦		door	delt	𐩦
	26. ו	𐩦	𐩦	𐩦	𐩦				
ה	5 ה	𐩦	𐩦	𐩦	𐩦			hē	
ו	6 ו	𐩦	𐩦	𐩦	𐩦				
ז	7 ז	𐩦	𐩦	𐩦	𐩦	3. 𐤅	hook, nail	waw	𐩦
ח	8 ח	𐩦	𐩦	𐩦	𐩦	4. 𐤆 =	A. Olive (?) B. weapon (?)	B. zai (zain?)	
ט	9 ט	𐩦	𐩦	𐩦	𐩦			ḥet	
י	10 י	𐩦	𐩦	𐩦	𐩦			tēt	
כ	11 כ	𐩦	𐩦	𐩦	𐩦	5. 𐤇	hand	yōd	𐩦
ל	12 ל	𐩦	𐩦	𐩦	𐩦	6. 𐤈 ?	bent hand	kaš	𐩦
מ	13 מ	𐩦	𐩦	𐩦	𐩦	7. 𐤉	ox-goad (?)	lamd	
נ	14 נ	𐩦	𐩦	𐩦	𐩦	8. 𐤊 𐤋	water	mēm	𐩦
ס	15 ס	𐩦	𐩦	𐩦	𐩦	9. 𐤌 𐤍 𐤎 10. 𐤏 𐤐	A fish B snake	A hūn B Hebr. ḥāḥāsh	A 𐩦 B 𐩦
ע	16 ע	𐩦	𐩦	𐩦	𐩦		prop (?)	semk (samk)	
פ	17 פ	𐩦	𐩦	𐩦	𐩦	11. 𐤑 𐤒	eye	'ain	𐩦
צ	18 צ	𐩦	𐩦	𐩦	𐩦	12. 𐤓 𐤔	mouth	pē	𐩦
ק	19 ק	𐩦	𐩦	𐩦	𐩦			šāde	
ר	20 ר	𐩦	𐩦	𐩦	𐩦			qot	
ש	21 ש	𐩦	𐩦	𐩦	𐩦	13. 𐤕 𐤖	head	rōsh (rēsh)	𐩦
ת	22 ת	𐩦	𐩦	𐩦	𐩦	14. 𐤗	tooth	shin	
		𐩦	𐩦	𐩦	𐩦	15. 𐤘	mark	tau	

Cowley (with Sayce) contributed an additional article to that of Gardiner which appeared in the same number of the Journal. We have already quoted them on the direction of writing. It will not be necessary to follow them in detail, but "with all reserve" they submitted the following results:

	ox, אֶלֶף = א
  	house, בֵּית = ב
  	nose-ring = ג
	fish, דָּג = ד (Cowley)
	ט
	= ז ? (Sayce)
 	= ח ? (Gardiner)
	= ט ? (Cowley)
	י
	= י ? (Sayce)
	כ
 	goad = ל
	water, מַיִם = מ
	snake, נָח = נ
	ס
  	eye, עֵינַי = ע
	פ
	צ
	bow, קֶשֶׁת = ק
	head, ראש = ר
	tooth, שֵׁן = ש
	cross, צֶלֶב = צ
	determinative of goddess.

Characters not identified

	Perhaps a variant of the snake.
 	" " " eye.
	" a hand, י or כ.
 	
	
	
	

The next real contribution to this study came in 1917 from Sethe who agreed on the whole with Gardiner, but thought that he had been entirely too modest in his claims. Gardiner had said, "If the new Sinaitic script is not the particular script from which the Phoenician and the South-Semitic alphabets are descended I can see no alternative to regarding it as a tentative essay in that direction, which at all events constitutes a good analogy upon which the Egyptian hypothesis can be argued."*

Sethe, on his part, regards this script as the "missing link" absolutely needed to show the derivation of the "Phoenician" alphabet from the Egyptian. Furthermore, he feels certain that the ancestor is the hieroglyphic writing rather than the hieratic. He says, "Der Ableitung vom Hieratischen widersetzt sich, von den paläographischen Hindernissen abgesehen, die Tatsache, dass in dieser hieratischen Schrift die ursprüngliche Gestalt der Bilder verloren war, während die phönizischen Buchstaben noch mehr oder weniger deutlich durch ihre Formen und ihre Namen ihre Entstehung aus bildlicher Darstellung ahnen lassen."**

Sethe also maintains that "all the symbols in the Sinai alphabet have a connection with Egyptian hieroglyphs." As to the date, he feels that these monuments, (whatever their date) are probably the first attempts of their kind--in other words, that the rise of this alphabet was in point of time very close to the origin of these very inscriptions. In this

* op. cit. p. 16.

** Nachr. der Gött. Ges. d. Wiss. 1917, pp. 437-75.

he is later borne out by Grimme*.

As to the constructive work of Sethe, it is Grimme's opinion that he succeeded in adding five known letters to Gardiner's list, namely א, ל, י, ז and פ. These are incorporated by Grimme in his own later work.** But Jensen*** is of the opinion, that although Sethe's signs for א, א, and ו are undoubtedly correct, his י, ל, ז, and פ are wrong and his separation of א and א is not successful. Sethe himself felt that there were in Gardiner's list 16 certain values (א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ ק ר ש ת) and five uncertain ones, (א א א א א)****.

Sethe had in 1916 maintained that the inventors of the alphabet were the Hyksos people, who subsequently brought it to Palestine in the 16th century. It could not at first stand the competition of the cuneiform and so did not predominate until later. Then after Gardiner had published his paper, Sethe came out in 1917 (as indicated above) with new enthusiasm, emphasizing the point that the originators of the Sinai inscriptions were Semites who had come out of Egypt with the Egyptians in order to exploit the mines of Sinai. He states that they were either the precursors of the Hyksos or the Hyksos themselves. And now Sethe has recently (1926) come out with another article (and we understand, a book) in which he again summarizes the situation and reemphasizes his own views. We give his table of comparisons on the next page. *****

- * See our page .
- ** Althebräische Inschriften vom Sinai, 1923. See his table in the back of the book.
- *** Geschichte der Schrift, p. 111.
- **** Cf. Grimme, p. 15.
- ***** Nachr. d. Gött. Gesellsch. d. Wiss. Gesch. Mitt. 1916, pp. 110-111.
- ***** ZDMG. 1926, pp. 24-54. Also pp. 151-153.

The next man to comment upon the Sinaitic monuments was Hans Bauer in 1918. In an essay entitled "Zur Entzifferung der neuentdeckten Sinaischrift" he opposed the view taken by Gardiner and Sethe. He could see absolutely no connection between the Sinai writing and the Egyptian hieroglyphs. Nor could he see any resemblance to the Phoenician characters. He based part of his argument for the former upon the fact that the Egyptian consonant letters are not found on the Sinai inscriptions. He also believes that it is not possible to derive letter values acrophonically from the names of the Semitic letters; that the only method possible is that of induction to arrive at the Sinai letters.*

Aegypt	Sinai	Phöniz	Südsem	Griech
𐦏	𐤏 𐤐	𐤎	𐤎 ¹³	Α
𐦏𐦏	𐤏𐤏𐤏𐤏	𐤎	𐤎 ⁹	Β
𐦏		𐤎	𐤎 ²⁰	Γ
𐦏𐦏		𐤎	𐤎 ¹⁹	Δ
𐦏	𐤏 𐤐 𐤑	𐤎	𐤎 ¹ Hoi	Ε
	𐤒 𐤓 𐤔	𐤎	𐤎 ³ Haut	Β
		𐤎	𐤎 ¹¹ Harm	
𐦏	𐤏	𐤎	𐤎 ¹⁵	Υ Ͱ
𐦏	𐤏 =	𐤎	𐤎 ¹⁷	Ι
		𐤎	𐤎 ²¹	Θ
𐦏	(𐤏)	𐤎	𐤎 ¹⁸	Ζ
𐦏	𐤏 𐤐	𐤎	𐤎 ¹⁴	Χ
𐦏	𐤏 𐤐 𐤑 𐤒	𐤎	𐤎 ²	Τ
𐦏	𐤏 𐤐 𐤑	𐤎	𐤎 ⁴	Ϻ
𐦏	𐤏 𐤐 𐤑	𐤎	𐤎 ¹²	Υ
𐦏	𐤏 𐤐 𐤑	𐤎	𐤎 ⁷	Ϻ
𐦏	𐤏 𐤐 𐤑	𐤎	𐤎 ¹⁶	Ο
𐦏	𐤏 𐤐	𐤎	𐤎 ²⁵	Τ
		𐤎	𐤎 ²³	
		𐤎	𐤎 ⁸	Φ
𐦏	𐤏 𐤐 𐤑	𐤎	𐤎 ⁶	Δ
𐦏	𐤏 𐤐	𐤎	𐤎 ⁵	Ζ
𐦏	𐤏 𐤐	𐤎	𐤎 ¹⁰	Τ

From ZDMG, 1926, p. 36

* Grimme, however, says that "up to now no writing has been deciphered by a purely inductive method apart from a few suppositious proper names." p. 16.

The next work to appear on the subject was that of Eisler--a wonderfully printed book for 1919, but according to Lidzbarski, a highly imaginative and fantastic sort.* Eisler accepts Gardiner's and Sethe's conclusions,** with a few exceptions, and believes that all the values of the alphabet had then (with him) been found! But while Grimme feels that he has made certain 𐤀 and 𐤁, and distinguished between 𐤂 and 𐤃, and added 𐤄, still he says: "So muss ich es ablehnen, in Eisler's Alphabet den einzig richtigen Schlüssel zur Enträtselung der Inschriftentexte zu sehen."*** Eisler, however, looks upon the Sinai writing as a sort of "side issue" of the primitive alphabet, rather than a direct offshoot from the hieroglyphs. He argues for a still older prototype, and uses for proof certain signs on a small block of wood; on a fragment of an inscription; and on a seal, all excavated at Kahun; also signs on a statue in the Egyptian museum at Cairo. All of these, however, Grimme considers Cretan.

Lidzbarski**** (1921) admits general failure on his part to successfully decipher the inscriptions. On no. 348 he reads 𐤏𐤃𐤅𐤃 𐤏 𐤍𐤏 𐤍, "Von Teim o Baalat!" "In der Inschrift 347 ist die Lesung 𐤏𐤏𐤏 sicher." He can go no further, but in speaking of Gardiner's 𐤏𐤃𐤅𐤃, he says, "Dies zeigt, dass das Alphabet keine starre Entlehnung war, sondern in Anlehnung an die Hieroglyphen in freier Nachbildung geschaffen wurde,

* For review see Theologische Literaturzeitung, 26, Mar. 1921, pp. 49-51, where Lidzbarski gives a very interesting example of Eisler's imagination.

** Littmann ("Die altsinait. Inschriften" in Internat. Monatschrift xv, 248-62) also agrees on the whole with them.

*** op. cit. p. 16.

**** Theologische Literaturzeitung, Mar. 20, 1921, col. 49-52

wie ich es schon vor 20 Jahren vermutet habe." Of his arguments in Ephemeris I (p. 134) (of which he speaks) we shall have more to say later. He also adds that "it could not have been an invention ab ovo for no writing was originally a phonetic writing."^{*} Concerning the inscriptions themselves he thinks that "we are probably dealing here with experimental attempts."^{**}

In the same year with Lidzbarski, H. Schneider^{***} maintained that the Sinai scribings could not have been made much before 1000 B.C., and that they are of Philistine origin. He stated his belief that they are to be deciphered through the Cretan script, a knowledge of which we do not at present have. He argued that the Egyptian name on the sphinx had been made illegible, probably by some barbarian prince who appropriated the votive offering for himself, but that this could not have happened during the powerful 18th., 19th., or 20th Dynasties. Therefore, the foreign barbarian could not have lived before the tenth century! Concerning the figure of Ptah, he said: "Denn jeder fremde Steinmetz, der nach 1800 im Hathor-tempel oder dem Minenbezirk ein Vorbild für eine Ptahfigur suchte, fand Darstellungen aus der 12 Dynastie vor, an die er sich halten konnte--wir haben also hier nur eine obere Gränze, keine untere, für den Künstler und Schreiber der Denktafel."^{****} Schneider's whole theory depends upon his late date and it must be said that his arguments for such are rather weak. He

* op. cit. col. 49

** id. col. 50.

*** OLZ. 1921, pp. 241-46.

**** op. cit. p. 243.

recognized the closely alphabetic character of the inscriptions, however, and remarked that the style of some twenty out of the 32 characters is Phoenician. Of the twenty, he thought that six occur in the Phoenician alphabet, four may be pictorial signs, and two correspond with Semitic names. He considered that Gardiner's and Sethe's readings "may be said to have failed."

Von Bissing, writing on "Die Datierung der Petrieschen Sinaiinschriften" in 1920* (the year before Lidzbarski and Schneider had written) had put forth the view that the Sinai writing was a "derivative of the Phoenician writing invented presumably by a Semite with a superficial knowledge of Egyptian hieroglyphics and their ability of expressing separate sounds."

A more recent writer still is Jirku, who in 1923 published a peculiar commentary on the Old Testament.** He devotes a few pages to "writing" in general, and a page to the origin of the alphabet in particular. Speaking of the work of Gardiner and Sethe he remarks that it seems "dass das phönizische Alphabet letztlich sein Vorbild in den ägyptischen Hieroglyphen hat."*** He gives it out as fact that the writers of this script "borrowed from Egypt the symbols, transformed them, but gave these symbols not the Egyptian phonetic value, but the value of the first letter of the word which this symbol had in their language. For example, in connection with beth, which should have been pr, 'house,' they gave the value b."

* Sitzungsber. d. Bayer. Akad. d. Wiss., 7 Febr. 1920.

** Altorientalischer Kommentar zum Alten Testament, 1923.

*** op. cit. p. 143.

We are now ready to discuss the work of Hubert Grimme, who has created such a stir in the newspapers of the world. Just as de Rougé was the keen champion of hieratics as opposed to hieroglyphics in an earlier day, Grimme is that champion in our day. There is, of course, a difference between the approach of the two men. De Rougé found in the hieratic characters of the Papyrus Prisse the prototypes of the so-called Phoenician alphabet, and he compared only the Egyptian alphabetic forms. Grimme finds in the Sinaitic inscriptions the intermediate prototype between the hieratic characters of the period 1500 B.C. and the later Semitic developed alphabet. De Rouge's hieratics were taken from a period prior to the Hyksos invasion; Grimme's from a period subsequent to that invasion. The latter, moreover, does not confine himself to the Egyptian "alphabet."

In 1923 Grimme published quite a remarkable book which he called "Althebräische Inschriften vom Sinai." In this book he examines in detail the original photographs of the inscriptions from Sinai and reproduces the whole series in far more detail, assuredly, than the photographs warrant. He develops an alphabet based on that of his predecessors, finds not only a character for each of the 22 Semitic letters, but for five of them discovers alternate forms. He compares these with the hieratic symbols (all ideographs or determinatives) of 1500 B.C.

His first consideration, however, is the date. He

insists upon a period near 1500 B.C. Not only so, but these inscriptions are "absolutely recent." In speaking of Sethe's phrase "relativ jung," he says, "möchte ich Sethe's Ausdruck relativ jung in absolut|jung umändern und darunter verstehen, dass die Sinaidenkmäler zeitlich mit der Entstehung der Sinaischrift ungefähr zusammenfallen."* It will be remembered that this is Lidzbarski's view.

Having decided the date, he next decides that the origin of this script is to be found in the Egyptian. Because there is "very little in the Sinai inscriptions that reminds one of pictures," or in the Phoenician characters, for that matter, and because the Sinai inscriptions are merely scratched in linear and not chiselled, he comes to the conclusion that their prototype is to be discovered in the hieratic rather than the hieroglyphs. And because of the date (1500 B.C.) he decides on hieratic subsequent to the Hyksos invasion, namely, the Papyri Ebers, Golenischeff, Westcar, and the Carnarvon Tablet published by Gardiner.** He proceeds, therefore, to a comparison of an ideogram or determinative of the latter group to each of the Sinaitic characters.

Concerning the twenty-two Semitic letters he arrived at the following results:

(1) 'Aleph, "cow" (symbol of the Goddess Hathor). There are two forms in the inscriptions; the first is merely the head of the cow, which unlike hieratics, looks to the left instead of the right, and the second is the fully formed hieratic determinative for cow, but reduced to a few characteristic lines.

* op. cit. p. 20.

** JEA. III. pp. 95-110.

GRIMME'S TABLE

Hiero- glyphen	Hierat.	Sinaitisch	Alt- semit.	Hiero- glyphen	Hierat.	Sinaitisch	Alt- semit.
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(3) Gimel, "Totality of the Temple Officials." The hieratic ideogram chosen is the symbol for the "temple staff." In the Sinaitic form it has one of the limbs pointing down, opening sometimes right and sometimes left. In North Semitic it is oblique.

(4) Daleth, "door or door-wing." The hieratic symbol chosen is the ideogram for "door." In both the Sinaitic and the Hieratic it is pointing down, sometimes perpendicular, sometimes horizontal.

(5) Hē, "cry of joy." It is the hieratic ideogram for "rejoicing." In the Sinaitic and Hieratic the leg is pointing to the right. In the North Semitic the head and the two arms seem to have become three parallels attached at an acute angle to the original horizontal main line. It was later turned 90 degrees and supplied with a supporting line.

(6) Waw, "ornamental rosette." (?) In the Sinaitic it has no marks inside and is adorned with short rays. In South Arabian it is elliptical. In North Semitic it stands on a supporting line and is open at the top.

(7) Zajin, "ornamental staff." In Sinaitic and Hieratic it is a long acute angle opening both to the left and to the right. In North Semitic it is composed of two horizontal parallels joined with a connecting line. In South Semitic it is two perpendicular lines joined by one or two oblique lines.

(8) Hauth (Hēth less good) "lotus flower." In Sinaitic the wavy stock bends either to the right or left; in South Arabian and Thamudic it is perpendicular. In North Semitic it is

various.

(9) Tēth (or So. Sem. Tajith), plant of unknown kind. He compares the Hieratic ideogram for "green," really a papyrus stock with the consonant sign d drawn through it. It appears in the Sinaitic but not with the hieratic horizontal. The South Arabian z corresponds rather than the t.

(10) Jōd (So. Sem. Jaman). This is a Semitic divine name which equals the Egyptian God "Seth" of Lower Egypt, and therefore is the symbol of the Delta. In Sinaitic the full Hieratic form sometimes appears and sometimes it does not. The Jōd has two forms, the first connected with the North Semitic which has the fuller form, and the other (which, however, Grimme does not find in the hieratic before 1500 B.C.) is connected with the South Semitic, the latter retaining very little of the Sinaitic form.

(11) Kaph, "plant of South." In the Sinaitic the perpendicular has become oblique. The North Semitic, however, is always upright, but the South Semitic is rectangular and therefore unrecognizable.

(12) Lawe (Lamed), "horizon." He compares the Hieratic ideogram for "horizon," which points to the left while the Sinaitic points to the right. In North Semitic it is turned down.

(13) Mēm (or Majin, or should it be the Ethiopic maj), "water." Consisting of three horizontal wavy lines in the hieroglyphs, it becomes upright in the hieratic, which returns to the horizontal in the Sinaitic. The North Semitic form consists of a horizontal wavy line with an oblique supporting line.

- (14) Naḥaš (Nūn) "water,--snake." There are two hieratic forms, the one for "snake," the other for "dragon" or "worm". The first turns to the right or left in the Sinaitic. The tail line is perpendicular in the South Semitic and upright in the North Semitic. The second form looks to the left in the Sinaitic rather than to the right, but has been superseded almost completely by the first form. It does appear in Thamudic.
- (15) Samekh, "fish." It is mostly not recognizable as such. In the Sinaitic it is simplified to the round or angular shape in which there is some suggestion of fins. In South Arabic a symmetrical form appears standing upright.
- (16) ʿAjin, "eye." (with or without pupil). In all Semitic alphabets it has become a circle.
- (17) Pē, "mouth." In the Sinaitic the more or less elliptical form has become rombic. The South Arabic preserves the diamond form.
- (18) Ṣadai, "face." (two sides of face). In Sinaitic it is horizontal with a natural looking neck, which in South Semitic becomes longer. The North Semitic form is so different that "it is bold to compare them."
- (19) Kōph, "belly cavity." Hieratic, Sinaitic, and North Semitic compare well except that the latter is perpendicular.
- (20) Rēsh, "head." In Sinaitic it is the head; in North Semitic the face has become a small triangle with a mere line for the neck; in South Semitic the face has fallen away and only the parting of the hair remains!
- (21) Shauṭ (Shīn) "penus.^{i?}" The hieratic has unsymmetrical ends.

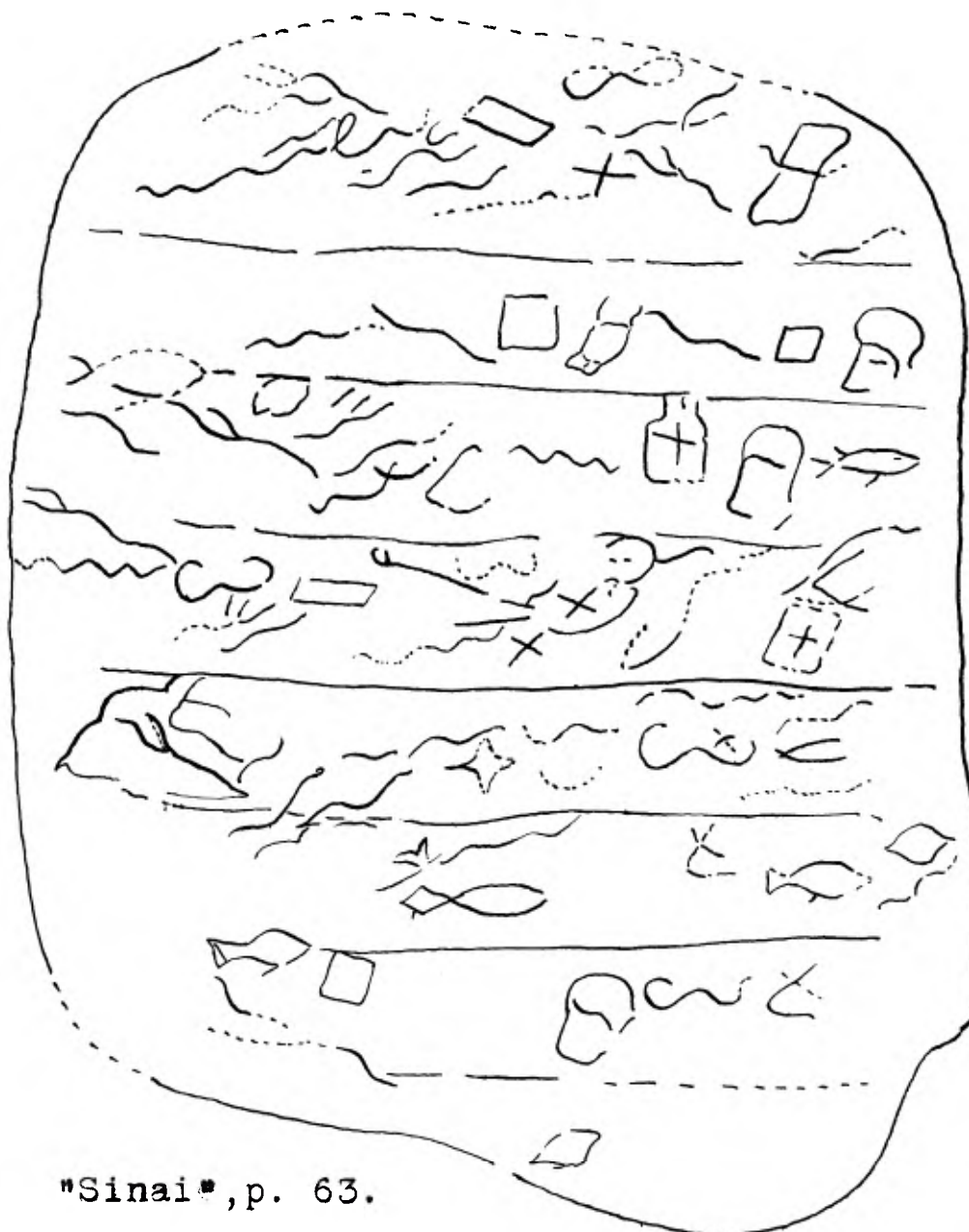
In the Sinaitic they are symmetrical. The two ends are spread out in the South Arabic. The North Arabic preserves the Sinaitic form.

(22) Taw (Stirn-) Mal" There are two forms: 1) the cross with horizontal and perpendicular bars of the same length is the Hieratic ideogram for "life;" 2) the cross with diagonal bars is the ideogram for "strength." The latter is the rarer form in the Sinaitic inscriptions. They are unchanged in all the Semitic alphabets.

These are the results that Grimme arrives at. Some of them it will be seen are radically opposed to the old notions concerning the names of the "Phoenician" letters. On page 25 he gives us his idea of how the alphabet came to be formed. "The consonantal value of each letter was found in this way: the hieratic symbol underlying it was translated into Semitic and the initial letter of the word thus obtained was taken to be its value. All Sinaitic symbols had pictorial representations in the mind of the inventor. It was thus the name arose which continues later into the Semitic--sometimes in the north and sometimes in the south. At the same time the letters got their names they were arranged in a fixed alphabetical order. Allied ideas were arranged in groups which were put into their places according to the closeness of their relationship."

The thing that has drawn so much popular attention to Grimme has been his translations of these inscriptions.

We do not propose to linger long over these. Most remarkable, perhaps, is that of No. 349 (pp. 63-71), which he discovers to be the work of Hatshepshut-Moses, chief of the miners.* The fifth line he makes to read "Thou wast kind, thou hast drawn me out of the Nile..." The implications are at once



evident! J.M.P. Smith has called attention to the fact that the Moses is purely conjectural. The word is made by adding an s to the long name and calling it Moses. If it is an s, there are other Egyptian names ending in "ms", such as Smith mentions. Grimme's translation of line five is not

* Cf. Grimme's "Hjatschepšu und die Sinaischrift-denkmäler" in ZDMG, 1926, pp. 137-150.

at all certain and was undoubtedly suggested by the supposed presence of "Moses." Völter (another of his colleagues in vagaries) translates the line differently and makes it read, "Thou hast been friendly, thou hast transferred me from the Nile-waters of forced labour." As a matter of fact, the line is probably too uncertain for translation. This is true of most of the inscriptions, that is, if one can judge from the photographs and the numerous reconstructions that Grimme makes. The only one that the present writer has seen is the sandstone sphinx in the British Museum. It is quite clear, as one can see even from the photograph. But in the main, one must proceed with caution in the actual translation of the illegible portions. One ought to go to Sinai once more to make a careful comparison with the originals, and probably even then complete results would be impossible. It is not, however, impossible to reconstruct an alphabet. Enough success in translation, using the Hebrew language and alphabet as a basis, has been had to warrant us in the positive statement that we have in these inscriptions an alphabetic writing.

Völter, writing in 1924 and 1925,* is hardly less radical than Grimme. He is, however, opposed to the idea that the invention of this alphabet took place on Sinai. He thinks that the variants on the inscriptions point to a previous considerable free use of the script. If the Hebrews came to Sinai and began an immediate use of the writing, it must have been in use for some time before. He concludes that the

* ZAW. xxxvii. 126-33; Nieuw Theologisch Tijdschrift XIV, 1925, pp. 215-44.

Hebrews, therefore, must have invented the writing in Egypt during the Hyksos reign when they had plenty of freedom!

Grimme and Völter have done some good work, but they have certainly been unfortunate in their haste. Such extreme use of the imagination has tended to cover up the sounder work of their predecessors.* Some scholars have, therefore, been led to ignore the Sinaitic texts as meaningless. Others, such as S. A. Cook,** Shaumberger,*** and J.M.P. Smith**** have all urged caution. The latter, however, is optimistic toward the the results obtained to date. In the summary at the end of his paper he says: "The assured results of the study of these inscriptions up to date are these: 1) The Egyptian origin of the Sinaitic writing is practically certain; all successful decipherers have worked with the Egyptian hieroglyphic as a starting point thus far, but Grimme substituted the hieratic or sacred Egyptian writing, and seems to have had better results. 2) The alphabetic character of the Sinaitic alphabet is quite clear. The Sinaitic alphabet thus becomes the oldest known Semitic alphabet. 4) The date of the inscriptions is c. 1500 B.C. 5) The language in which these inscriptions were written was evidently Hebrew, and a type of Hebrew not essentially different from that of the Old Testament. 6) The presence of Hebrews upon the southern end of the peninsula of Sinai is clearly attested by these inscriptions."

* Gardiner has been so cautious and modest that his work has seemed to suffer at the hands of some, but in every case where others have examined the originals, his accuracy has been borne out as against that of Grimme. See Furlani in Riv. d. Studi Orientali 10, 1925, 591.

** Q.S. 1925, p. 160.

*** Biblica, Mar. 1925 pp. 26-49.

**** Journal of Relig. March 1926, pp. 195-200.




On the eve of the release of this dissertation, there comes to our hands the proof sheets of an article on "The Origin and Development of the Alphabet" by Professor Ullman of the University of Chicago. The article is to appear in The American Journal of Archaeology for 1927, probably the January-March number. Prof. Ullman, a classical philologist, champions the Egyptian origin and places the date of that origin around 2000 B.C. He admits the alphabetic character of the Sinaitic inscriptions and looks with favor upon the work of Gardiner. He does not give much credence to the translations of Grimme, and asserts that those who seek ALL the letters of the alphabet among only 150 characters are, in the very nature of the case, open to suspicion. He cites the Aḥîrâm inscription of approximately 150 letters where the letters tsade or goph are missing. He himself attempts no translation of the Sinai inscriptions, but tries to find, on the acrophonic principle, closer prototypes among the hieroglyphs for the various Sinaitic characters. In order to do this, he makes exclusive use of the cruder hieroglyphs of Sinai itself. He even states that the "inventor" used but one inscription in choosing his characters and that their order in this inscription probably had its influence upon the subsequent order of the alphabet! He himself, in fact, finds most of the prototypes he suggests on a single Sinaitic hieroglyphic inscription (Gardiner and Peet, No. 53).

We find a good deal of common sense in this excellent paper written, as it were, by an outsider. There is one


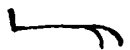




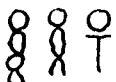
contribution that deserves special notice. He sees, with Sayce*, the need of tilting the letters to one side in order to make them correspond to their names. He also asserts the need of this in order to make good the Egyptian theory of origin. Due to the fact that some of the letters are tilted and some are not, Ullman has been led to suggest that "the desire to save space by making the letters as narrow as possible led to the tilting of some and the retention of the original position of others." Concerning mem and shin, he says that the South Semitic best preserves the early forms, but as the two letters tended to become confused, Greek and some of the Phoenician alphabets changed the position of the mem. "Greek alone in common with South Semitic, preserved the form of shin. The other early Phoenician alphabets preserved the tilted mem and got around the difficulty by tilting the vertical shin a quarter turn to the left. As in the case of shin, so in that of lamed, South Semitic and Greek preserve the correct tilt, while Phoenician turns it upside down to avoid confusion with gimel." "Zayin might have been one of the letters to be tilted, but the shortening of the blade of the sickle, begun even in the Sinai hieroglyphs, made this unnecessary. Aleph too could be treated either way. In Phoenician it was tilted, in South Semitic not. South Semitic also preserved the upright position of he. In Phoenician there is a quarter turn to the left. This could only have taken place after the body and legs of the original figure had disappeared." If Ullman's prototypes are correct,

* P.S.B.A. 32. (1910) p. 215.

his summary is correct: "The letters whose height was greater than their width retained their original positions; those whose width exceeded their height were tilted to the right 90 degrees so as to make them narrower. The suggestion may have come in changing from columnar writing, as Sayce thought."

Among the identifications, Ullman's most significant contributions are as follows: He seems to have found forms of the 'house' that resemble very closely the regular North Semitic beth. In Nos. 35 and 33 of Gardiner and Peet's "Inscriptions of Sinai" he has noted three examples of . Although he finds a "boomerang" (cp. Assy. gamlu) in No. 54 of his hieroglyphs, (), still he suggests that possibly the Semites may have got along at first without a gimel, using the kaph for both surd and sonant, just as early Latin. Then when gimel was added, it was put not at the end, but between its sister sonants, beth and daleth.^{*} Ullman adopts the suggestion of Sethe that he comes from the hieroglyph of a man with upraised hands (so Grimme). Sethe, however, derives the South Semitic hoi 𐤇𐤏, haut 𐤇𐤏, and harm 𐤇𐤏; and he 𐤇 and heth 𐤇, also, from the same hieroglyph--the heth of course standing for the haut and harm. But Ullman makes the heth correspond to the haut alone and finds ^{for them} a separate prototype in the hieroglyph for "wall," . The two different letters--he (hoi) and harm--coming as they do from the same hieroglyph, may have arisen from a slight differentiation of function. Ullman, furthermore, adopts the meaning of

* Compare Delitzsch on gimel, p. 120.

"hook" for waw and "sickle" for zain, and finds splendid prototypes-- {, ז z,--among his Sinaitic hieroglyphs. He suggests for teth either the city sign (for No. Sem.) or the vase stand  (for So. Sem.), the latter possibly leading to the meaning of "basket." Concerning yod and kaph, he disagrees with Gardiner, making the yod mean the hand with the arm (cf. As. *îd(u)* and Gn. 24:22 and Je. 33:12), for which he finds the prototype . For kaph, on the other hand, he adopts just the palm of the hand. Since lamed probably comes from a root meaning "to teach" and this verb is used in Hos. 10:11 of training a heifer to the yoke, the noun may mean "whip." Ullman finds a definite picture of such a whip used in Egypt, in addition to the conventionalized hieroglyph, which compares very well with what he finds on the Sinaitic inscriptions! He uses the "column" hieroglyph for the samekh, since it probably means "prop" or "post." The idea that the North Semitic  is a development of the upper part of , while the South Semitic  has developed the lower part is very attractive. Another attractive idea (given also by Schaumberger*) is the possibility that tsade may come from the word tsad, 'side' (of a man). Ullman selects for the prototype a hieroglyph showing the side view of a man sitting in a chair, . Assuming that qoph stands for "knot" in preference to "head" (although "head" is not barred thereby), he chooses for a prototype the loop sign . His most original suggestion is that the most remarkable form of the

* op. cit. p. 326ff.









koppa in one of the earliest Greek inscriptions (Abu Simbel, dated seventh century) may be the original Egyptian form. It is λ .


It will now be clear, to those who think, that we have in these Sinaitic inscriptions something worth investigating; but to investigate and to "go crazy" are entirely different matters. In trying to decipher them, there are several things to take into consideration. The writing is crudely done and possibly by different hands; the inscriptions are worn and weather-beaten; the materials now available are very meagre. Yet, there are those who seek to discover all the letters of the later alphabet in these eleven inscriptions, and to differentiate between letters on the slightest deviations. How, for instance, Grimme can see the difference between his yod and kaph, his beth and pe, his he and heth, ayin and waw, not to mention how he arrives at some of them, is very hard sometimes to see. Yet they give him a certain freedom of choice in working out his translations. It is not the kind of thing that will lead eventually to the discovery of the ancient alphabet.


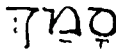
There are, it seems to us, certain assured results.

- 1) The aleph comes from the "ox head".
- 2) The beth comes from the "house" sign.
- 3) The mem comes from the "water" wavy line.
- 4) The ayin comes from the "eye."
- 5) The pe comes from the "mouth."
- 6) The resh comes from the "head."
- 7) The shin comes from the "tooth,"--not mountain nor penis.

8) The taw comes from the "mark". Scholars are almost unanimous in conceding these results. It will be noted that every one of these letters have good Semitic names that have in each case led to the proper identification. It is almost impossible to arrive at any assured result without these names. To cast them aside as needless and superfluous for this problem, is an act of unwise boldness.

Other names, the meanings of which are fairly certain are daleth, waw, yod, nun, and kaph. Daleth undoubtedly means "door"--the wing of a door, and the character almost unanimously* chosen from the Sinaitic symbols is , which resembles the South Semitic  and it is not hard to see the connection with the North Semitic , especially the ancient Byblos form. Waw certainly means hook, pin, peg, or nail in the Old Testament. Grimme's "ornamental rosette" is, therefore, out of the question. In view of the South Semitic form of the waw,   , it may be that the top of the North Semitic waw was originally closed. If so, Sayce's  may not be far wrong. If the word means "hook" rather than just "nail" or "peg", then Ullman has found the best prototype. Of the Sinaitic symbols selected for waw, those chosen by Gardiner, Sethe, and Ullman are much more preferable than that of Grimme. Yod and kaph both mean "hand" but the latter means the "hollow or flat of the hand", the "palm" or even the "sole of the foot." Gardiner gets his "bent hand" from the verb  which means "bend". Ullman maintains that yod means not only the hand but the arm also.

* Cowley, remembering that  means "fish", would have the fish of the inscriptions equal the daleth.

Even the North Semitic yod looks like a side view of the bent right hand with the forearm and even a part of the upper arm. Ullman's prototype  looks attractive, and resembles Grimme's counterparts of the "symbols of the delta," in one instance at least. Grimme's contention that yod is the Semitic divine name is hardly likely. Nun certainly means "fish", but the same letter in South Semitic is called nahash which means "serpent." Both occur on the Sinai inscriptions. Sethe and Grimme assign the fish to samekh; Cowley, as we have already indicated, to daleth; while both Gardiner and Ullman reserve both the fish and the snake for the letter n. The latter idea seems to be the correct one, since neither nun nor nahash violate the acrophonic principle. The "fish" did not survive although its name did. It is not likely that the samekh is a remnant of the "fish", while, on the other hand, Ullman's suggestion for samekh given above is very attractive. Samekh almost certainly means "prop" or "support." (Cf. the verb , lean, rest, support?) The "column" sign would, therefore, be appropriate.

In addition to samekh, therefore, there are three more names generally considered very uncertain. They are gimel, zayin, and lamed. "Camel," "boomerang," "angle," and "temple staff" have all been suggested. "Camel" comes closest to the name itself, but there is no such animal among the hieroglyphs of Egypt. Ullman may be right in the suggestion that it may be a later addition to the sonants. Both Eisler's enneiform and Delitzsch's old Babylonian prototypes seem

unlikely although the resemblance to the latter is very striking.* Zayin is also uncertain. It may mean "olive" on the basis of the Greek. Both "weapon" and "sickle" have likewise been suggested. Grimme's "ornamental staff" prototype among his hieratics bears little resemblance to either the North or the South Semitic. The "sickle" idea is favorable. What lamed means is uncertain. It does not occur. $\tau\eta\zeta\eta$ occurs in Ju. 3:31 and means "ox-goad," to judge from the context. If the word is not corrupt, it undoubtedly comes from the root meaning "to teach." Labad, "wool", has also been suggested. We have already given Ullman's argument for "whip." It sounds well.

The letter-names that are supposed to have absolutely no meaning are hē, hēt, tēt, ṣadē, and goph.** To be sure, meanings have been suggested, but all of them on the basis of their resemblance to a hieroglyph or their own likeness to some object. For instance, hē resembles the man with uplifted hands, hēth looks like a fence, tēt like the "city sign," (or the So. Sem. like a "basket."), ṣadē like the side view of a chair, and goph like the head and neck. It is questionable whether the proper names may be supplied from the pictorial character of the forms. One is never certain that he has the right sort of imagination! We may, however, take hope from the fact that ṣadē and goph are seldom used, and do not, in fact, even appear in the Aḥîrâm inscription. The same is decidedly true of tēth, and as for hē and hēth, it is altogether probable that Sethe is on the right track.

* Compare p. 118

** See p. 60

In conclusion, it may be said that the effort to translate these inscriptions has only begun. We are sadly in need of more such inscriptions and another expedition to Sinai is highly desirable. We are also in need of a saner interpretation of the contents of those we now have. The originals need thorough investigation. Perhaps, a committee of scholars should be appointed to decide what should be read as genuinely original and what is mere cracks and imagination!! But, on the whole, the Sinaitic "foreign" inscriptions have proved to be "stepping stones" as well as "stumbling blocks" to a better understanding of the history of the alphabet. We may safely say that the Egyptian script has had a greater influence upon the invention of the alphabet than any other factor.

RECONSTRUCTING THE EVIDENCE

In the light of our study, it is now time to come to some notion about the origin of the alphabet. Yet to even now state in dogmatic terms just how it all came to pass, is to run counter to some one else's notion. The fact still remains that we are not able to lay our hand and eyes upon the "inventor" of the alphabet. We have not yet "caught him in the act," and until we do, a complete demonstration is impossible.

There are, however, certain lines of reasonable theorizing that one's mind may take. After spending a couple of years on a subject, even of this impossible nature, one ought to have some ideas. They may not be susceptible of proof, and they are in fact not, but they came out of an interpretation of the evidence that we have been considering through the last two-hundred pages.

We begin with the Aḥîrâm inscription of Byblus-- a regular and thoroughly alphabetic inscription, the letters of which are not much different from the letters on the steles written four centuries later. We find certain local variations both in script and language, reminding us of a close connection with the ancient "Canaanite" and considerable influence from the East. We find also that Byblus has from earliest times been in close touch with Egypt, importing papyrus rolls in large quantities. This is an assured fact

during the twelfth and thirteenth centuries. From the calligraphic nature of the script of the thirteenth century, it would be rather preposterous to assume its invention took place only a hundred or two-hundred years before.

Our opinion concerning the date of the Sinaitic inscriptions tends to follow Gardiner's suggestions rather than that of Petrie and others. While they cannot be later than 1500, there is nothing to prevent the earlier date and Gardiner has given some very good reasons for it.* We are glad to find that Ullman is also adopting our view that these inscriptions date probably from c. 1800 B.C. We are also of the opinion that these inscriptions are among the first attempts, but not necessarily the very first. It ought to be borne in mind, moreover, that the invention of this alphabet is not the same as the invention of the "Phoenician" alphabet, nor the same as the South Semitic alphabet. Variations in forms existed before the alphabets as we know them came to be. The two early Semitic alphabets are widely different. They need not have come from the same alphabet at all. In fact, they may be cousins far removed. To derive both alphabets from the same prototype is probably impossible. What we need ^{is} (are) a number of links in the chain of development. Apparently, we have only one of them. That link may not come quite so near the beginning of the chain as some of us think. On the other hand, there must be examples of this script somewhere in Sinai or elsewhere that bear a closer

* See p. 184 .

resemblance to the later script, both in the North and in the South.

While all this is true, the inscriptions from Serâbît el-Khâdim sufficiently demonstrate that the incentive and most of the materials which the inventor of the very first alphabet used came from the Egyptian hieroglyphs. But the origin is not to be sought in any one set of circumstances nor did but one language make the only contribution.

Whatever the Biblical story of Abraham may mean, it seems clear that it is representative of an historical movement of peoples from the East toward the West and down into Egypt. It is really too bad that we do not know more about the Hyksos invasion but it may be enough for our problem to realize that Semites from Syria came into Egypt as conquerors about 1800 B.C. and that for several centuries before, the Semitic immigration into Egypt had been very heavy. We may also keep in mind that Semites had a way of securing high positions in Egyptian affairs. As to the exact relation of the Joseph story to this historic period we need not bother, but it is interesting to find a man of Semitic blood and of his intelligence in such prominence at the Pharaoh's court. A man like Joseph (or even Abraham) would take into Egypt all the qualities that we should expect in the "inventor" of the alphabet. He is young, bright and creative. He comes with a knowledge of the Babylonian script. He enters a new land full of interest, and not least of all is the new script. We can imagine him (or them) literally "pouring over" the

Egyptian hieroglyphs during the first year, and learning about as much as a new missionary to China! One of the first things that he would be bound to notice is the acrophonic principle. The very pictures, too, would probably be more attractive to him than the cuneiform. Nor do we need to postulate a thorough knowledge of cuneiform, but with it or not, his language was very closely related to the Babylonian-Assyrian. The cuneiform was always a clumsy script for the Semitic tongue anyway.

We cannot divorce the personal element from the invention of the alphabet. There is, of course, such a thing as evolution of characters, and neither the evolutionary nor the personal element need be discredited. The subsequent history of the alphabet nicely demonstrates the two of them. The development of the old Aramaic script into the "square character" adopted by the Jews is for the most part unconscious evolution, but even here we have too often failed to make room for personality. We must never forget that all cursive style is due to the desire of the person writing. The Egyptian hieratic has no doubt developed, and yet the hieratic manuscripts of the same period vary with the hand of the scribe. So it was in the history of the Semitic alphabet. But we find even in that history deliberate steps being taken. Such was the invention of the vowel system. Experiments were made, to be sure, and from each experiment something was learned, but the diacritical marks cannot be said to have "evolved." Such was the deliberate creation of the Berber alphabet, when the

deteriorated Punic script was used for a basis. It wasn't a brand new invention but it was a definite, conscious step. Such, also, was the formation of the Sabaean alphabet as we know it today. Back of it was a history, but the form of each letter speaks out clearly of conscious effort. The same may be said of the "Phoenician" alphabet. We are rather of the opinion that the alphabet to which we are introduced in the thirteenth century is the direct descendant of a very conscious effort, and if so, we need not postulate a long period of "evolution" for the "Phoenician" alphabet. The forerunner of that alphabet may have gone through a more extended period of growth. If, therefore, these conscious efforts are justified, we must visualize, if we can, an individual*, not only at the beginning of the whole alphabetic career, but at each one of the conscious efforts we have postulated.

As far as the first "inventor" of the alphabet is concerned, we may call him Joseph if we like. The name is merely symbolic. He was neither an illiterate bedouin nor a skilled native scribe, and yet he was educated and clever. He was, in fact, the same kind of fellow that later standardized the North Semitic alphabet, not to mention the South Semitic, of which we know too little.

Who standardized the "Phoenician" alphabet, and when

* Lidzbarski and Vincent are also of this opinion. The latter's position was made clear to me by him in a personal conversation in April, 1926.

did he do it? We think we see him at the court of Pharaoh during the Amarna period, a century before Aḥîrâm carved his inscription. He is in the scribal employ of the government but he is not a native. He may well have hailed from such a place as Gebal on the Phoenician coast. He would be acquainted with the cuneiform, more or less, and felt its difficulties. He would know something of the linear syllabary of Cyprus, and would no doubt be stimulated by the attempts to simplify writing in the Aegean basin. Belonging as he does to the Phoenician race of seamen, one can only imagine what his knowledge of their script might be. As to the cuneiform, we do not know when it first invaded Syria and the West, but it was certainly strongly entrenched in the 14th and 15th centuries. There are those who believe Abraham brought it with him, but the Amarna letters seem to reveal a certain lack of acquaintance with it on the part of even the scribes, and certainly the Egyptian Pharaoh.

Arad-Hiba at Jerusalem writes in quite a personal way to one of the scribes--a Semitic scribe--at the Egyptian court. "Bring thou in plain words unto the king, my Lord. The king my Lord's territory is lost--ḥal-ka-at." (Knudtzon, 286). In one letter, the writer wants to emphasize the words "is lost," so he adds a Canaanite gloss a-ba-da-at, the Hebrew אבד אבד . As Burney says, "we can scarcely err in interpreting this emphasis as carrying the implication, 'Do not let there be any mistake: when I say ḥalkat, I mean abadat'; and hence the inference is fair that the Egyptian king's secretary,

like his correspondent, was more familiar with the West Semitic than with Babylonian.* It would seem to be indisputable that the use of the glosses shows a lack of familiarity with the cuneiform.

Burney would argue, therefore, that the Babylonian was neither the language nor the script of Canaan at this time. He does not think that the widespread use of cuneiform proves the inexistence of the Semitic alphabet, but that the two could exist side by side just as Hittites retained their script alongside the cuneiform. However one tries to explain the problem, the fact that the cuneiform is widely used is evident. How it came to be used is another question. When it started to be used is still another.

We have, therefore, this paradoxical situation. Babylonian cuneiform is widely used in the 14th century between Semitic scribes who show a certain lack of familiarity with its use. It may be that the glosses can be explained in some other way. If they can, so much the better. But the very paradox argues in favour of the strong influence of the Babylonian over the land. Unagreeable as this script was to the genius of the West Semitic language, it was nevertheless used. How well our own hypothetical scribe knew the script we do not know; but we assume he knew enough to be influenced by it, and that he disliked it enough to seek a way out. How he may have become acquainted with the new alphabet represented by the Sinai inscriptions is impossible

* Book of Judges, p. 57.

to say. Perhaps he found inscriptions in Sinai or in Egypt which have so far been denied to us. How widely known the script was we can only guess; but it is a safe guess that if it had been used very much by the Hyksos during their regime, the native Egyptians would not likely have continued its use. This may explain the lack of much information about the Hyksos period. Our Semitic scribe may have stumbled on it in very much the same way as Petrie did in 1905.

All of this is, of course, said in relative terms. We will not attempt to say how the alphabet got into Syria, much less Byblus, but we do point to the almost immediate decline of cuneiform in favor of the alphabet. In 1400 B.C. the former is widely used; in 1200 B.C. the alphabet is in use at Byblus and probably elsewhere. Whatever it may mean to any of us, the significant thing known as the "Exodus" occurred between these two dates. This alone points to the Egyptian origin of the alphabet.

We are not arguing for specific items in this summary, because they cannot be proved to the satisfaction of us all, but the significant thing that we are suggesting is the early Semitic invention of the alphabet on Egyptian soil, followed by at least four centuries of development, and then a very definite standardization of this alphabet into what we call the "Phoenician" alphabet only a short time (a century, or two,) before we find it in use at Byblus in the latter part of the thirteenth century.

This theory is the only conceivable one that fits into all the data concerned. The twenty-two letter Semitic alphabet of the North must have been borrowed or invented some time between the 15th and the 10th centuries. This we know from Egyptian transliterations of Hebrew names and Palestinian place-names. Those of the 18th Dynasty differentiate between h and h , c and g , while those of the Shishak list do not. Therefore, since we know this alphabet to have been in existence in the thirteenth century, it must have been standardized into the twenty-two letter alphabet that we know between the 15th and the 13th century, probably somewhere near 1400 B.C. The South Semitic alphabets are somewhat older, while the Sinaitic alphabet is considerably older than either.

We leave our problem at this point to the illumination of further discoveries.

FINIS.